

BUTANE-PROPANE

HEADQUARTERS FOR L
INFORMATION SINCE

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You're paying for it...
GET IT ALL!



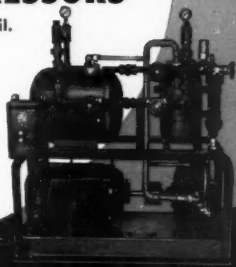
The kid who sucks the
soda dry gets his money's
worth. The LPG operator who
leaves hundreds of gallons of vapor-
ized fuel in an "empty" tank car doesn't.
Use a Roney Vapor Compressor to get all you
pay for—vapor as well as liquid.

MORE FOR YOUR MONEY WITH

RONEY

LPG VAPOR COMPRESSORS

- ★ No shut-down to add crankcase oil.
- ★ Oil separation with automatic return.
- ★ Surge tank to keep liquid out of compressor.
- ★ Forced feed lubrication.
- ★ Capacity to fit your LPG transfer needs. Choice of 4 models.



RONEY INC. 1511 W. FLORENCE AVE., INGLEWOOD 1, CALIF.

"LIGHT WEIGHT"



"STRENGTH"

"EASE OF HANDLING"

HERE'S WHY *You* PREFER HACKNEY CYLINDERS OVER 3 TO 1!

Yes, these are the things which you look for in a cylinder. That's according to a recent, completely impartial, nationwide survey among you LP-Gas distributors and dealers. And this survey shows you prefer HACKNEY CYLINDERS more than 3 to 1 over the next most popular cylinder—more than 2 to 1 over *all* other cylinders combined! That's because you know Hackney Cylinders give you more of what you expect in a cylinder.

You'll find those features you want in the complete line of Hackney Cylinders—from 420 lb. giants to small 5 lb. industrial type cylinders. Write for full details.



"CONSTRUCTION FEATURES"



"APPEARANCE"



"UNIFORMITY"



"REPUTATION OF MAKER"



Hackney
MILWAUKEE

PRESSED STEEL TANK COMPANY

Manufacturer of Hackney Products

1487 S. 66th St., Milwaukee 14 • 1399 Vanderbilt Concourse Bldg., New York 17
227 Hanna Bldg., Cleveland 15 • 936 W. Peachtree St. N. W., Room 112, Atlanta 3
208 S. La Salle St., Room 790, Chicago 4 • 552 Roosevelt Bldg., Los Angeles 14



An Exclusive Advantage

HERE'S THE ONLY METER REPAIR PLAN
TAILORED TO YOUR NEEDS...

Complete Measuring Unit for
ROCKWELL-EMCO
NO. 00 METER

In Years To Come This Plan Will
SAVE TIME, TROUBLE, MONEY!

You get more than compact, lightweight accurate meters when you buy Rockwell-Emco No. 00's. You gain the advantage of an exclusive repair plan that once and for all will relieve you of meter maintenance.

After a period of years you can recondition your worn meters by simply installing either new or factory rebuilt measuring units in the bowl type bodies. Only a screw driver is needed to make the switch. You have the option of returning worn internal units or complete meters to the factory for economical repairs. Learn all about this new plan that will permit you to get the most out of your meter investment. Write for bulletin 1163 and a complete schedule of repair prices.



ROCKWELL MANUFACTURING COMPANY

Pittsburgh 8, Pa.

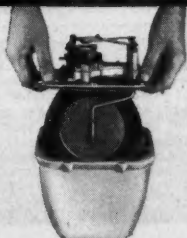
Atlanta Boston Chicago Columbus Houston Kansas City
Los Angeles New York Pittsburgh San Francisco Seattle Tulsa

Illustrated is a complete No. 00 Rockwell-Emco replacement measuring unit in its specially designed corrugated shipping carton.

HOW TO PUT NEW LIFE INTO ROCKWELL-EMCO NO. 00 METERS ECONOMICALLY



1. Remove only twelve cap screws—then lift cover from meter body.



2. The worn measuring unit can now be pulled from the body.



3. Take a factory fresh replacement unit (either new or rebuilt) from shipping carton.



4. Insert it in the same meter body and replace cover. Return old unit to factory for repairs.



A JENKINS PUBLICATION

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Branch Offices

New York (18)—11 W. 42nd St. Joseph M. Dematthew, Manager. Phone: CHickering 4-1969.
Chicago (3)—1064 Peoples Gas Bldg. David Carmen, Manager. Phone WABash 2-2589.
Tulsa—P. O. Box 4055. Craig Espy, Manager. Phones: Business—2-2414; Residence—7-9807.

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A.O. SMITH!

NEW *Permaglas* AUTOMATIC GAS WATER HEATERS SELL FOR NO MORE THAN ORDINARY WATER HEATERS!

Today's BIG NEWS from A. O. Smith is THE Big News of the automatic water heater industry. Read why!

With brilliant NEW MODELS and sensational NEW LOW PRICES, A. O. Smith now widens your market for automatic gas water heater sales — brings all the proved advantages of *Permaglas* quality and design within reach of your customers and prospects! Here's proof that once again,

A. O. Smith engineering and production leadership goes away out front! Here is a completely NEW STANDARD OF VALUE for the automatic water heater mass market.

Once again, A. O. Smith provides more compelling reasons than ever before to influence more people to choose *Permaglas*. Watch those reasons pull MORE new gas water heating business to the doors of those who feature *Permaglas*!

You'll Be PROFITS Ahead with A.O. Smith

- Shipments of more than a million water heaters from the Kankakee works prove public acceptance and demand for A. O. Smith water heaters.
- Mounting sales records prove that MORE people want *Permaglas* Automatic Gas Water Heaters for permanent freedom from tank-rust. The glass-surfaced *Permaglas* tank can't rust because GLASS CAN'T RUST.
- Forget servicing headaches caused by tanks that

rust or corrode. The *Permaglas* tank is unaffected by any and all water conditions.

- *Permaglas* is easier to demonstrate, easier to sell. Glass-surfaced steel tank with *Ceramitron* construction is exclusive, non-competitive, clinches the sale—quicker.
- New models in popular sizes at new low prices make MOST water heater prospects *Permaglas* prospects for you!

LET US SHOW YOU HOW YOU CAN GET THIS BIG BUSINESS! MAIL COUPON NOW!

A.O. Smith

AUTOMATIC WATER HEATERS

Atlanta 3 • Boston 16 • Chicago 4 • Dallas 2 • Denver 2 • Detroit 2
Houston 2 • Los Angeles 14 • Midland 5, Texas • Milwaukee 2
New York 17 • Philadelphia 3 • Phoenix • Pittsburgh 18 • Salt Lake City 1
San Diego 1 • San Francisco 4 • Seattle 1 • Tulsa 3 • Washington 6, D.C.
International Division, Milwaukee 1 • Licensee in Canada: John Inglis Co., Ltd.

A. O. Smith Corporation
Water Heater Division, Dept. BP-1050
Kankakee, Illinois

Show me how I can cash in on the big news about *Permaglas* Automatic Gas Water Heaters.

Name

Firm

Address

City Zone State

LP-GAS NATIONAL ADVERTISING

many of them YOUR prospects

*Just look at
this line-up
of magazines!*



*This Sets the Stage for the **BIGGEST**
PROFIT YEAR You Ever Had!*

Now Reaches 23,952,000 Readers

THE COMPLETE 4-WAY PROGRAM IN A NUTSHELL

National Advertising: Large, colorful, sales-building advertisements . . . in 44 state, regional and national magazines.

Local Promotions: Window posters, displays, direct mail pieces, newspaper ad mats and radio spot announcements . . . all tied into the national advertising theme . . . especially prepared for imprinting with your name, address and LP-Gas trade name . . . available in any quantity at low, mass-production cost.

Publicity: News stories and educational material . . . released to newspapers, magazines, radio stations, schools, 4-H Club leaders and county agents . . . all over the country.

Employee Training: Still in the planning stage . . . would include materials and ideas to increase effectiveness of selling methods, operating and service procedures . . . an important aid to more business that will be made available at low cost . . . to participants in this national program.

HOW YOU CAN CASH IN

Every LP-Gas dealer in the country stands to benefit directly from this great National LP-Gas Promotional Program. However, the *degree* to which *you* benefit depends on what *you* do to help *yourself*. Remember, every family in your community *able to afford your products and services* is being exposed to strong LP-Gas advertising and publicity many times every month. Turn this buying urge into buying action by making it easy for your prospects to enjoy the convenience of LP-Gas service. Advertise in your local newspapers. Send out regular mailings to every prospect on your list. Make your show room as attractive and informative as possible. Urge your salesmen to make more calls and *demonstrations* . . . starting today. Write today for full information.



This emblem identifies companies supporting the national program.

NATIONAL COMMITTEE for LP-GAS PROMOTION

Dept. BPN, 11 S. La Salle St., Chicago 3, Ill.

Take an active part
in this campaign

Here's your profit-building sales tip

Sell Your Local Business

BS&B

Industrial Propane System



Hi R. Profits says:

High-Volume Commercial Users Mean High Profits

The butcher, the baker, the candlestick maker . . . the cafe, the garage, the industrial plant . . . any place that requires fuel for generating heat or power represents a prospect for a BS&B Propane System. Every community has many such industries . . . each looking for ways in which to operate more efficiently. Take your LP Gas story to these establishments, and you'll develop a lasting and profitable association.

Explain how LP Gas saves labor and time. Explain how propane gives cleaner and more efficient service. Point out that a better-built BS&B Propane System is the best buy. You have a service and a system that mean real economy. Sell them!

BS&B

DOMESTIC PROPANE SYSTEMS

P OCTOBER

ustries



As a BS&B dealer, you are entitled to our hard-hitting merchandising material which helps other dealers do a more effective selling job. Ask for and use this material to ring up more sales among high-volume customers.

WRITE TODAY

Join the team that is rolling up big profits selling BS&B Domestic and Industrial Propane Systems. For information on dealerships, address the Propane Gas Equipment Division, Black, Sivalls & Bryson, Power and Light Bldg., Kansas City 6, Missouri.

SYSTEMS

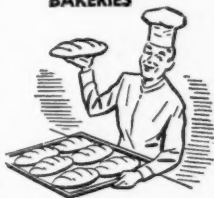
They're better built because of . .

1. Complete Modern Facilities, Backed by Experience Gained in 56 Years.
2. Advanced Engineering and Design.
3. Automatic Submerged Arc Welding. X-Ray Quality Controlled.
4. Code Construction Throughout.
5. Hydrostatically Tested, Dehydrated and then Sealed Against Moisture.

LUNCH ROOMS



BAKERIES



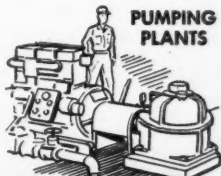
VEGETABLE DEHYDRATING



BRAZING



PUMPING PLANTS





DEALER



ENGINEER



SERVICEMAN

take

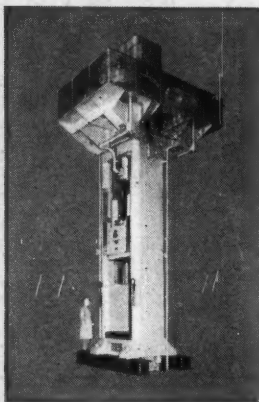
a good

look

at

WEATHERHEAD

**WEATHERHEAD IS YOUR ONE RELIABLE
SOURCE FOR LIGHTWEIGHT, RIGHT PRICE
HIGH QUALITY CYLINDERS**



MAMMOTH CYLINDER PRESS INSTALLED BY WEATHERHEAD

A towering 500 ton hydraulic press for the manufacture of 60 and 100 pound LP-Gas cylinders was recently installed in the Cleveland plant of The Weatherhead Company. The mammoth proportions of the press (it measures 32 feet high) are such that a section of the building had to be cut away before installation could be completed.

Driven by two 200 horsepower motors, the huge press draws the steel at a single stroke into perfectly formed shells which are then put through an annealing process and finished into Weatherhead lightweight cylinders.



THE MARK OF QUALITY

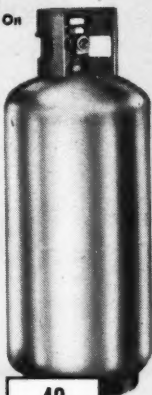
HIGH STRENGTH ALLOY STEEL ASSURES YOU OF TOUGH, LIGHTWEIGHT CYLINDERS WHICH WILL RENDER MANY YEARS OF TROUBLE-FREE SERVICE.

CYLINDERS

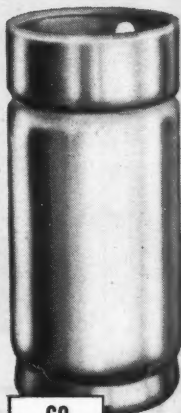
Weatherhead 100 Pound
Cylinders Are Available On
Attractive Credit Terms.
Inquire Today.



20
pound



40
pound



60
pound



100
pound

Look Ahead With

Weatherhead

CLEVELAND 8, OHIO, U. S. A.

ST. THOMAS, ONTARIO, CAN.

COMPLETELY STOCKED WAREHOUSES

ALBANY, N. Y.	KANSAS CITY, MO.	ATLANTA, GA.	MINNEAPOLIS, MINN.	DALLAS, TEX.
Fuller Rd., Colonie	1517 Walnut St.	281 Buckhead Ave. N.E.	W. 35 St. & Hwy. 100 S.	118 Leslie St.

BIG HACKNEY CYLINDERS

Model RH-300A—
Removable Hood;
24" in dia. and 56"
high including col-
lar. Can be charged
with 300 lbs. Pro-
pane or 357 lbs.
Butane. Like other
removable hoods
and permanent col-
lars, it is used for
permanent instal-
lations.

Model PC-200A
Permanent collar;
22" in dia. and 45"
high including col-
lar. Can be charged
with 200 lbs. Pro-
pane or 239 lbs.
Butane.



Model PC-420A— Permanent
collar; 29" in dia. and 56" high
including collar. Can be charged
with 420 lbs. Propane or 500
lbs. Butane.



and here's proof they prefer Hackney Cylinders

Don't take our word for the outstanding popularity of Hackney Cylinders! Look at the results of this completely impartial, widest possible survey by an independent source. You LP-Gas dealers and distributors—you men who really know cylinders—prefer Hackney Cylinders more than 3 to 1 over the next most popular cylinder. You prefer them more than 2 to 1 over all other cylinders combined!

**containers for
gases, liquids and solids**



ARE PREFERRED, TOO!

cost-saving features make them popular with users

No wonder LP-Gas dealers and distributors like these sturdy, lightweight Hackney Cylinders! They like them for the same reasons that make the Hackney RC-100A the most popular cylinder in the LP-Gas industry—cost-saving light weight, rugged, enduring strength, smart, attractive appearance—and a host of superior construction features.

backed by skill and "know-how"!

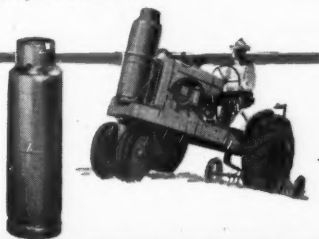
In the LP-Gas industry Hackney Cylinders have always been tops! Why? Look at the years of experience! Look at the exhaustive testing... both in the laboratory and in the field! Look at the millions of Hackney Cylinders

that have gone into service... from these big fellows to the small 5 lb. industrial models! It's only natural that dealers and distributors should think of Hackney when they think of L-P Gas Cylinders.

Get full details today! *Pressed Steel Tank Company makes a complete line of LP-Gas Cylinders. All are engineered to your requirements. Write today for full details.*

Cylinders for Tractor Conversion

Balance your summer-winter gas sales by developing the farm tractor conversion market. Send for further information on Hackney cylinders designed for this service.



Hackney
MILWAUKEE

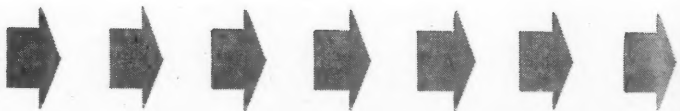


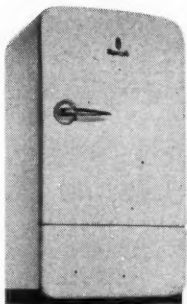
PRESSED STEEL TANK COMPANY

Manufacturers of Hackney Products

Main Office and Plant: 1487 South 64th St., Milwaukee 14, Wis.; 1299 Vanderbilt Commerce Bldg., New York 17, N.Y.; 227 Hunter Bldg., Cleveland 15, Ohio; 936 W. Peachtree St., N.W., Room 112, Atlanta 5, Georgia; 208 S. LaSalle Street, Room 770, Chicago 4, Illinois; 862 Broadway Bldg., Los Angeles 15, California.

**There are no
finer GAS appliances
than these...**



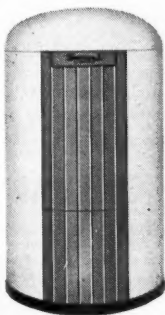
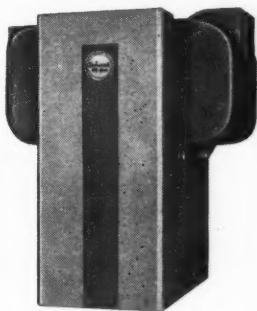


THE SERVEL *GAS* REFRIGERATOR

The only refrigerator that stays silent and lasts longer ... because it's the only refrigerator with no moving parts in its freezing system. No motor to wear. No machinery to grow noisy. Proved by performance.

THE SERVEL ALL-YEAR *GAS* AIR CONDITIONER

... for homes, stores, offices. Cools in summer. Heats in winter. Dries the air when it's humid. Moistens the air when it's dry. Filters out dust and pollen. Completely automatic.



THE SERVEL COPPER BALL *GAS* WATER HEATER

The only home water heater with the revolutionary ball-shape tank ... like that used by modern industrial plants for faster, more economical heating. Double-thick insulation keeps in the heat. Copper tank can't rust.



Servel Inc.

EVANSVILLE 20, INDIANA



**LEADING MANUFACTURERS OF
TRACTORS, TRUCKS and BUSES
USE
SELWYN-LANDERS LP-Gas Equipment**

You can't beat S-L "know how" when it comes to designing LP-Gas equipment for engine fuel tanks. From years of first-hand experience right in the field, we have learned what it takes to make a good, dependable and safe LP-Gas valve or fitting.

From one source, Selwyn-Landers, you can get every part required to fit a mobile tank; filler, vapor, relief and service valves—rotary or float gages and outage valves.

Selwyn-Landers engineers will help you select the right equipment for your automotive, domestic and storage tanks and for I.C.C. containers.

SELWYN-LANDERS COMPANY

4709 East Washington Blvd., Los Angeles 22, Calif.

*Listed by Underwriter's Laboratories



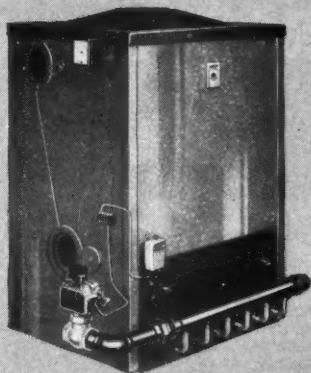
SEND FOR

Complete S-L catalog covering
tank valves and fittings for
every LP-Gas use.



AMERICAN-Standard

First in heating . . . first in plumbing



The EMPIRE and the STANDARD

engineered to supply economical, automatic heat for homes of all sizes

No matter what the size of building to be heated, one of these gas fired boilers—the Empire or the Standard—from the American-Standard line can handle the job. Both of these outstanding units have been so designed and coordinated by our engineers that they offer maximum heat output under all conditions.

● The EMPIRE Gas Boiler is one of the most striking gas fired boilers on the market. Its colorful jacket is the new American-Standard Forge Red which catches the interest of all who see it on your sales floor . . . and its compact design makes it an attractive installation in any basement. The boiler is constructed of durable cast iron and is equipped with precise, dependable controls to assure lowest operating and maintenance cost compatible with ample comfort. Important among these controls is the Automatic Gas Valve, operated by the thermostat to maintain desired room temperatures effortlessly and economically. To increase the unit's efficiency still further there is a thick layer of insulation under the trim

jacket, which prevents excessive heat loss into basement and reduces operating cost. The Empire comes in models for basement or first floor installation.

The STANDARD Gas Boiler has the same design features and precision controls as the Empire, but is supplied—at a somewhat lower cost—with a jacket which does not conceal all controls. It can be used to heat homes, and is also available in larger units for installation singly or in battery in all types of buildings.

For additional data on all types of American-Standard Heating Equipment for LP-gas, see your Wholesale Distributor. **American Radiator & Standard Sanitary Corporation**, P. O. Box 1226, Pittsburgh 30, Pa.

LOOK FOR THIS



MARK OF MERIT

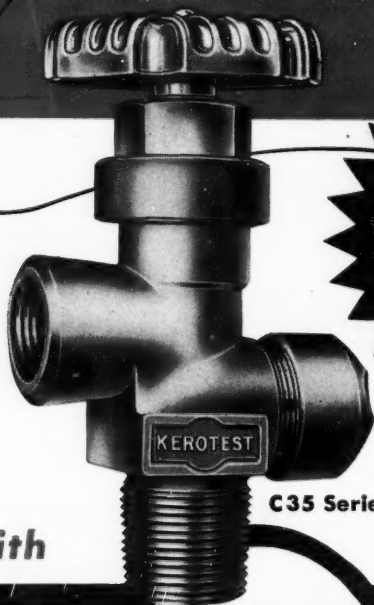
Serving home and industry

AMERICAN-STANDARD • AMERICAN-BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILERS • ROSS HEATER • TONAWANDA IRON

At No Extra Cost

Make Your LP SYSTEM

STRONG, SAFE, DEPENDABLE



**THOUSANDS
OF USERS HAVE**

Proved
**THE
EXTRA VALUE!**

C35 Series

with

KEROTEST

FORGED BRASS

DIAPHRAGM PACKLESS

CYLINDER VALVES

UNIFC
Forge
bed y
again
traction

BUI
More
usual
tions
failing

AMPL
New
type
empl
above

Pro
E

From one of the world's largest
manufacturers of all types of
cylinder valves comes . . .

The **FINEST CYLINDER VALVE** FOR THE LP-GAS INDUSTRY

UNIFORMITY OF MATERIAL

Forged bonnet nut and forged body assure uniformity against expansion and contraction in severe weather.

BUILT FOR SAFETY

More than double the usual tests and inspections to guarantee un-failing safety.

AMPLE SAFETY RELIEF

New improved "pop" type safety assures an ample relief capacity above your requirements.

APPROVED

These valves are approved by Underwriters' Laboratories, Inc. and Bureau of Explosives for 100 and 150 lb. cylinders.

ALL METAL PACKLESS CONSTRUCTION

The original Kerotest patented non-perforated all metal diaphragm packless construction with back seating feature unequalled for quality of performance and long life.

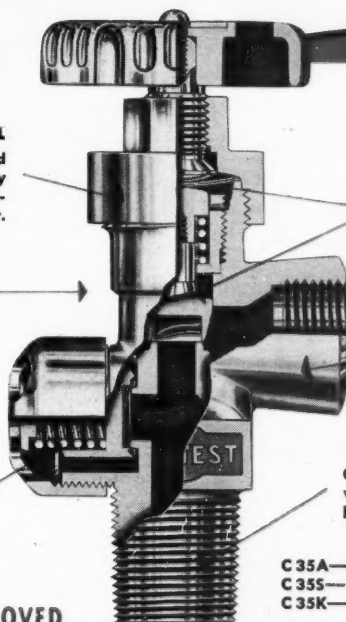
UNSURPASSED FILLING CAPACITY

EXTRA LONG INLET CONNECTION

Cylinder connection supplied with 14 full threads assuring longer valve use.

TYPES

- C 35A—Standard
- C 35S—with 1/8" fuse plug
- C 35K—with liquid level gauge



*Produced
Exclusively
by*

KEROTEST MANUFACTURING CO

PITTSBURGH 22, PA.

America's First Name in Quality Valves

The Place...

The HYDE-A-WAY SEA FOOD HOUSE

YONKERS, NEW YORK

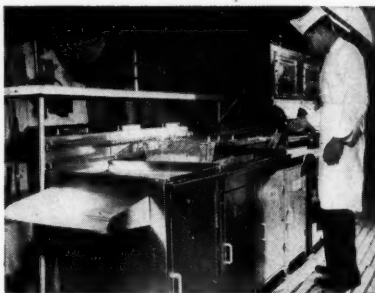
the
Pitco Installation

FOUR

PITCO
Frialators

REG. U.S. PAT. OFFICE

Help make the Hyde-A-Way the
place to go in Westchester County
for the best fried sea foods.



the good word about PITCO

Only Pitco Frialators
Turn Out Better
Fried Foods 25% Faster.
No Wait For Heat Recov-
ery Due To Pitco's
Revolutionary New
"Area" Burner.



PITCO FRIALATORS
APPROVED BY A. G. A.

The HYDE-A-WAY Sea Food House
YONKERS, N.Y.



October 5, 1949

J. C. Pitman & Sons Sales Corp.
711-719 Broad Street
West Lynn, Massachusetts

Gentlemen:

We have recently installed four (4) of your latest type #18 All Stainless Steel Pitco Frialators. These have replaced four (4) Pitco Fryers which we purchased in 1939. The new Fryers operate about twenty-five per cent (25%) faster and help us to keep up with our fried food orders.

Fried foods cooked at proper temperature in the best shortening available has helped to make the HYDE-A-WAY Sea Food House one of the most outstanding and favorite eating places in all of Westchester County. We are pleased to recommend Pitco Fryers for doing an outstanding job on all kinds of fried foods.

Thanking you for your cooperation in the past, we are,

Cordially yours,

The HYDE-A-WAY Sea Food House

Rose & Julius Volgnier

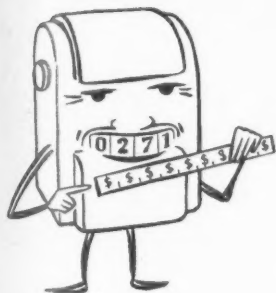
Rose and Julius Volgnier, Jr.
Proprietors

Copyright 1949 J. C. Pitman & Sons Sales Corp.

J. C. PITMAN & SONS SALES CORP.
Sole Manufacturers of Pitco Frialators

711 BROAD STREET

LYNN, MASSACHUSETTS

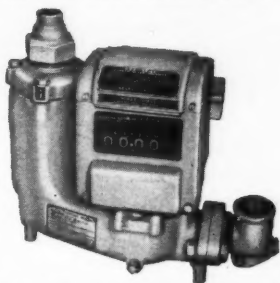


YOUR PROFITS ARE MEASURED *in Gallons*

In the L-P gas business, you buy gallons, and sell gallons. The dollar sign is just something you tack on after you add up the gallons. These dollars can't be any more accurate than your count of the gallons.

There's an accurate way to account for these gallons—Neptune Red Seal meters—nationally known for their ability to remain accurate years longer, with lower maintenance costs. Make your records permanent and build customer confidence, too, with tickets automatically printed by Red Seal Print-O-Meters.

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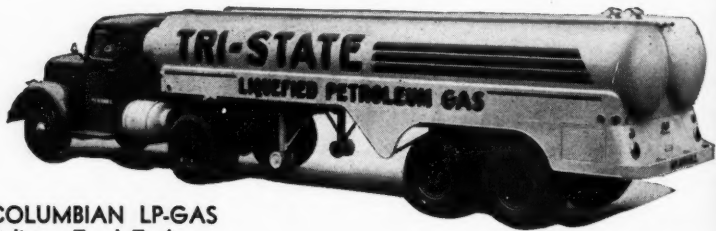
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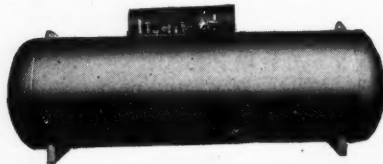
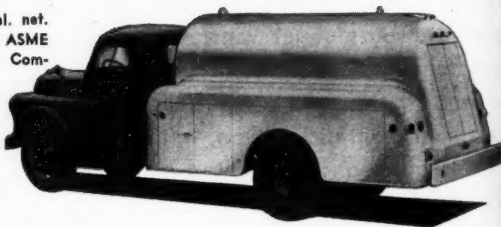
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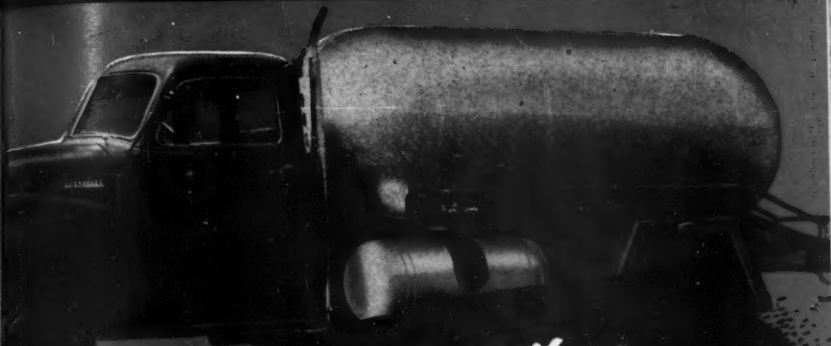


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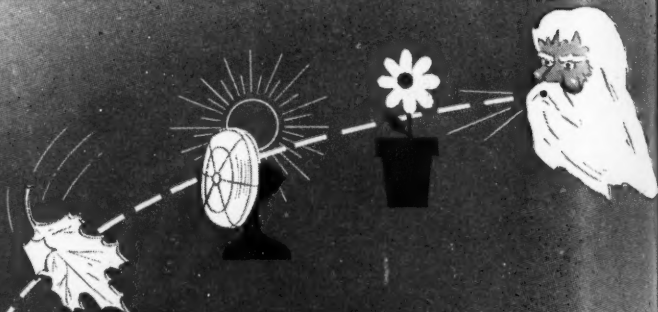
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LETTERS

♦ **BUTANE-PROPANE** *News* welcomes letters from our readers, but it must be understood that this magazine does not necessarily concur in opinions expressed by them.—Editor.

Gentlemen:

We have been informed by our suppliers that we should not use Type K copper tubing for propane underground installations, due to soil conditions which eventually would cause pin holes in the tubing which then would have to be replaced.

We prefer to use Type L copper tubing, but wish to inquire if the Type K copper tubing can be used underground satisfactorily.

A.T.O.

North Dakota

Type K and Type L refer to the wall thickness of copper tubing and not to any difference in the chemical composition of the material from which they are made. Type K, which is recommended for underground services, and general plumbing and heating purposes, has a heavier wall than Type L, which is recommended for general plumbing and heating purposes only.

If an unfavorable soil condition exists which will attack Type K tubing, then Type L, which has thinner walls, would be shorter lived. Any copper tubing or steel pipe which is placed underground in soil which may attack it should be coated with asphaltum and wrapped with heavy paper or canvas to protect it from corrosion.—Ed.

Gentlemen:

We note that some manufacturers of space heating appliances recommend using a condensate tee at the flue connection of each heater. Where propane is the fuel, do you consider that flue condensate is sufficient of a problem to make these tees necessary and advisable?

In your Safety Issue No. 2 you show in your section covering "Safe Practice Tables and Diagrams," Fig. No. 1, "Suggested Method of Constructing Drips in Gas Piping." Is this general practice with propane gas, and a necessary precaution? We have had trouble with freezing regulators, but never with freezeups in the gas line.

C.E.R.

Ontario

The recommendations of the appliance manufacturer should be followed when installing his equipment. Also, do not confuse the "condensate tee" with the draft diverter.

Drips in gas lines are often omitted in lines used to distribute LP-Gas where meters are not used. Seldom does any water condense in the gas lines when LP-Gas is taken off the top of the tank in vapor form.

However, in town or city systems, where house meters are used and the liquid LP-Gas is taken from the tanks and vaporized, drips are usually installed. Drips not only catch water, but also oily condensates and other heavy ends which may enter the gas stream.—Ed.

Gentlemen:

Will any liquid LP-Gas pump, new or old, fill a truck or tractor tank full 100% without a vapor return hose—that is, if the tank is used till the motor stops?

A.C.

Nebraska

Under favorable conditions any pump may fill a truck or tractor tank 100% with liquid LP-Gas. Even though the pump is protected by a liquid by-pass relief valve on the discharge side (as they should be) it is still possible. If the truck or tractor tank was empty and the pressure low before filling started it would be quite easy to do.

The high pressure of the liquid, built up

by the pump, will collapse the vapor over the liquid providing the temperature does not increase in the proper ratio.

All LP-Gas tanks should always be attended during fuel transfer operations and filling stopped when liquid LP-Gas shows at the proper, fixed liquid level, stop-filling gauge.—Ed.

Gentlemen:

We are interested in obtaining a comparison figure in gallons, if possible, in the consumption of two identical furnaces, one using furnace oil and the other using LP-Gas. The consumption time could vary from 1 hour to a period of 24 hours.

C.A.H.

Nevada

A gallon of furnace oil has a heating value of about 130,000 Btu, while a gallon of propane has a heating value of about 93,000 Btu. It would appear, therefore, that a gallon of oil would be equivalent to 1.4 gals. of propane.

However, the efficiency of burning gas is better than oil in small space heaters. Conservative estimates place these efficiencies at 75% for gas and 60% for oil. On this basis, it would take only 1.13 gals. of propane to replace a gallon of furnace oil.—Ed.

Gentlemen:

Is it possible to obtain a meter to record the cubic feet of vapor taken from the customer's tank through vapor return? If such a meter could be installed on a bulk truck it would be quite an asset to prestige to give the customer reassurance of full gal-lonage.

J.W.T.

North Dakota

It is possible to obtain a meter to record the vapor returned from the customer's tank through the vapor return line.

However, determination of the quantity of gas returned is not as simple as merely reading the cubic feet of gas which the meter registers and converting it to equivalent gallons of liquid.

Following are some of the factors which must be considered if the job is done properly:

1. Instead of the ordinary house or low pressure meter, an expensive meter which is capable of withstanding the high tank pressures must be used.

2. The pressure of the gas passing through the meter must be determined and a correction made for it.

3. The temperature of the gas passing through the meter must also be determined and a correction made for it.

4. The piping of the vapor through the meter must be arranged in such a manner that the vapor can flow in only one direction through the meter.

The best way to check a meter for accuracy is to return it to the factory or a duly authorized representative of the factory who has the proper equipment to make the necessary checks and adjustments. In some states the bureau of weights and measures has mobile equipment which it uses to check liquid LP-Gas meters in the field.—Ed.

Gentlemen:

Please give me the following information on how to test propane gas shipments. I have been bothered so much with butane and other heavy ends in my bulk truck freezing up that if it happens again this year it will, perhaps, put me out of business.

Can you instruct me how to test my bulk truck gas before unloading into bulk tanks as this northern part of Michigan gets down to 40° below zero very often and I am aiming at a positive gas test so as to give better service.

R.E.G.

Michigan

Without the use of expensive and time-consuming equipment, about the only way to test your propane shipments is with a pressure gauge and thermometer and the use of Fig. 4, p. 45, of the Handbook Butane-Propane Gases. When using this chart, increase all pressure gauge readings by 14.7 lbs. since the chart is designed for absolute pressures.

Care must be used to obtain true pressures and temperatures. Pressure gauges, especially low cost ones, often give erratic readings. The gauge should be checked regularly, preferably on a dead-weight gauge tester, to see that it is giving correct readings. The thermometer must also be a good quality unit and should be calibrated against one of known accuracy.

Assume that the pressure in the car is 57 lbs. gauge and that the temperature is 40°F. Then the absolute pressure is $(57 + 14.7) =$

71.7 lbs. per sq. in. absolute. Refer to Chart 4 and follow along the horizontal line opposite 40°F to its intersection with the vertical line representing 71.7 lbs. per sq. in. absolute pressure. It will be noted that these two lines intersect slightly to the left of the solid black line representing the pressures and temperatures of propane, which indicates there is a small amount of butane in the mixture.

The amount of butane in the mixture can be approximated most easily by use of the Chart, Fig. 1, p. 42. This chart is designed for mixtures at 60°F so it is necessary to determine the vapor pressure at 60°F. This can be done by drawing a line parallel to the solid or dotted line nearest the intersection of the coordinates representing 40°F and 71.7 lbs. absolute pressure. Extend this line until it intersects the line representing 60°F. This will be where the ordinate representing 99.7 lbs. absolute pressure crosses it. Since the pressures in the chart, Fig. 1, are gauge pressures, 14.7 lbs. must be deducted from 99.7 lbs., which leaves 85 lbs. as the estimated gauge pressure at 60°F. Referring to the chart, Fig. 1, you will note that the sloping line representing 85-lb. pressure intersects the heavy diagonal line at a point very close to the coordinates 89.5% propane and 10.5% butane.—Ed.

Gentlemen:

We are installing a propane-fired conversion burner in a coal furnace, which is located in the basement of the home.

In addition to having automatic controls and 100% shutoff valve on the gas burner, we would appreciate any additional safety measure for basement installations, which you might have to offer.

S.R.H.

Kentucky

If at all possible it would be advisable to provide ventilation at the basement floor level so that if LP-Gas should escape in the base-

ment it would be dissipated before a damaging concentration developed.

No doubt you realize that, inasmuch as liquefied petroleum gas is heavier than air, any ventilation methods you would install should be on the floor and should slope downward toward the outside of the building.

If the building is located on a hillside, it should be directed toward the low side of the hill and if the building is on the level, the trench should be made deeper at the outer end.—Ed.

Gentlemen:

We have for some time considered entering the bulk heating business with propane.

One of the factors which has restricted us is our lack of knowledge of how to determine heat loss and average cost of operation during the heating season for the various types of construction used in our area.

With this information we feel that we could start limited heating jobs with our present cylinder systems, and eventually branch out to include bulk systems.

Can you advise us where we could get the information which we need?

W.C.C.

Indiana

When you wrote this letter you probably had not yet seen the July issue of BUTANE-PROPANE News. It was devoted almost entirely to the subject of house heating and provides a great deal of information on how to determine heat losses and average costs of installations.—Ed.





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comment

THERE is increasing importance attaching to state regulations covering the testing for accuracy of LP-Gas measuring equipment.

At least one state—California—which has provision for such testing, is retarded in making inspections by limited equipment or personnel, or both. In the long run, the LP-Gas industry will suffer, for whether measuring equipment, temporarily out of adjustment, favors the dealer or the fuel purchaser, complaints and disadvantages will result.

California has made earnest efforts through its Bureau of Weights and Measures to cooperate with dealers but inspections have been limited by lack of enough testing units. With the hope of remedying the situation, Calor Gas Co., San Francisco, recently petitioned the state to add to its equipment and made these arguments, among others, for aid:

"Because of the nature of this product, the meters used to measure it can go out of adjustment very rapidly and very severely. The testing devices are complex enough and expensive enough so that only a very few counties and the State can economically operate them.

"It is not only desirable, but imperative, that liquefied petroleum gas meters be checked for accuracy at least twice every year to assure customers of reasonable accuracy. This is impossible with the single testing unit now maintained by the State.

"We sincerely urge additional testing units be placed in service as soon as possible, for the present equipment has not only proved its worth but also proved the need for more equipment."

California dealers are urged by Calor Gas to support its efforts for an enlarged inspection system and the attention of dealers in other states is invited with the hope that it will gradually lead to universal testing of measuring devices to increase their accuracy, which is so important to all concerned.

The value of emphasis on safety is bringing its own reward to dealers in Arkansas. Spurred on by the dealers' association there and the 100% co-operation of M. L. Blair, chief inspector of the boiler division of the state, who administers the regulations, the safety record has been so good that one of the large insurance companies now proposes a group plan to members of the Arkansas Butane Dealers Assn., providing for a material reduction in costs.

You can't say safety doesn't pay.

It's OK to stock up on butane. You won't be called a hoarder if you do.

In fact, producers are again urging dealers and distributors to fill their own bulk plants and to deliver to their customers the maximum amount of fuel that customer storage will permit.

—By Ed.

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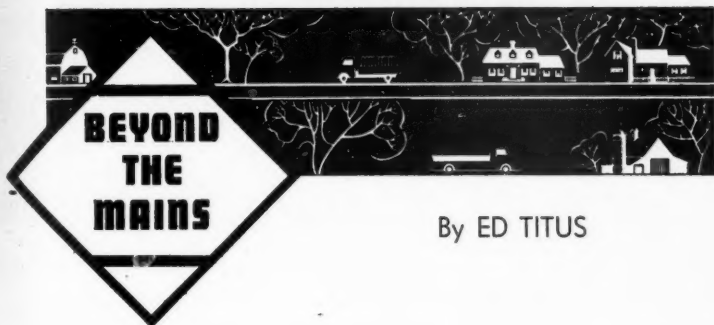
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By ED TITUS

THE butane-propane industry has a tremendous story of its importance in the defense picture to tell to the authorities in Washington. But the story must be told in the most effective way.

In the last war, government officials got a confusing, disjointed picture of the industry. It was like the story of the blind men feeling an elephant, and the different stories they told of what the elephant must be like. The one who felt the trunk thought the elephant was like a fire hose; the one who felt the leg thought it must be like a tree; and the tail seemed to a third to resemble a rope.

That was the kind of picture of the LP-Gas industry confronting officials in the war of the '40's. A distributor would tell one story, a producer another, and an equipment manufacturer would present still another side. Dealers and large-scale users had even different versions. Then sometimes a group of some branch of the industry in one section of the country would get a prominent politician from that area to see what he could do in Washington for them.

This tended to make the vague idea an official might have of the industry even vaguer. Many of them thought of LP-Gas as something they had seen outside a summer bungalow. And this did not seem a very essential wartime use.

•
Whichever way we're headed—whether into an all-out mobilization soon or into more gradual defense preparations—the butane-propane industry has a big role to play.

Housing developments may have to be built for defense

workers, often beyond the mains. Use of LP-Gas for industrial purposes will increase, as it did in World War II. There are many potential uses by the Army.

If mobilization accelerates, commercial cooking will boom as in World War II. Workers on defense projects need good hot food, both at home and on the job. In the recent war the government saw fit to push a nutrition program, to assure a healthy nation and vigorous workers. The connection between nutrition and sufficient LP-Gas for cooking fuel is obvious.

In the madhouse that Washington becomes when defense effort accelerates, an industry, even a strategic one, has to state its case simply and forcefully. Otherwise it gets lost in the shuffle, in the struggle for steel and other materials, and for tank cars.

The following are a few specific suggestions:

1. Select a group or committee to speak in Washington for all interests and all associations, national and local, and present the broad industry picture.

2. If later on the industry is called upon to furnish men to advise on industry cooperation in the defense program, be sure the men sent are of caliber and breadth to represent the industry most effectively. The industry should seize any opportunities it gets to assist government agencies by lending the most competent representatives available.

3. Get up a simple coordinated story of the industry, as a strategic industry, and get it up in a form that any intelligent person can understand, whether or not he's ever heard of butane and propane. Then get this story to the right people in Washington as early as possible. This is a public relations job.

Meanwhile there's every reason to continue aggressive efforts to get business, particularly until you know which way the wind is going to blow. One estimate is that in the coming 12 months, only 10% of this country's production capacity will be used for defense purposes. If this estimate holds and we don't soon get into more all-out preparation, the other 90% will provide plenty of jobs and necessitate plenty of selling.



Service Formula Pays Off

In Joplin, Missouri

The Joplin Butane Co., operating on the principle that high pressure selling won't work in the LP-Gas business, conducts a service operation that effectively throttles electric competition—keeps its tank customers happy with a liberal delivery policy.

By C. THOMAS

THE JOPLIN BUTANE GAS CO., Joplin, Mo., reserves the right to fill customers' tanks at its own discretion.

Here's how it works: Each tank customer receives service once a month. The customer knows the exact day he can expect service but he never knows how much gas (if any) will be delivered. The amount is at the discretion of the routeman.

A Joplin truck goes out on schedule. It fills the tanks as they come. With three more tanks to service and

only 300 gals. left in his tank, the routeman may leave 100 gals. at each of his last three stops. The amounts and date of delivery are duly recorded and on the next delivery the serviceman will start his route with the tanks not completely filled on the last run.

The Joplin trucks go out loaded and come back empty, with an

Above: Joplin Butane Gas layout. Office and appliance showroom in foreground.

operating cost of 23.3 cents a mile. There is no back-tracking and no one runs out of fuel. The tanks are sold outright to the customers.

Whereas Monte Taylor, vice president and service manager of the company, is convinced that dealers should push large capacity systems for better customer satisfaction and more effective servicing, at the same time he does not believe in high pressuring tank sales from cylinder customers who utilize but a small amount of fuel.

An LP-Gas business can only be run successfully on the basis of fair dealing, Mr. Taylor believes, giving the customer his money's worth and making a legitimate profit. No two districts or territories can be handled the same.

S. B. Turner, a company stockholder and sales manager, has a background of high pressure selling. He formerly sold electric appliances in one of the fastest sales organizations in Detroit and sold engraving service to schools in the Midwest. But Mr. Turner has found that high pressure tactics in a rural community are fatal in the LP-Gas business.

"We tried using a few outside salesmen for a short while," Mr. Turner said. "It was a very disappointing venture. I could break myself of employing high pressure tactics but couldn't break my men."

He could not get salesmen who were willing to learn the product and sell it on its merit.

"They wouldn't take the time. Salesmen of this caliber, when they do close a deal, ruin you in that territory for a long while. Farmers are clannish to that extent . . . and warn their friends and relatives not to be duped, as they were."

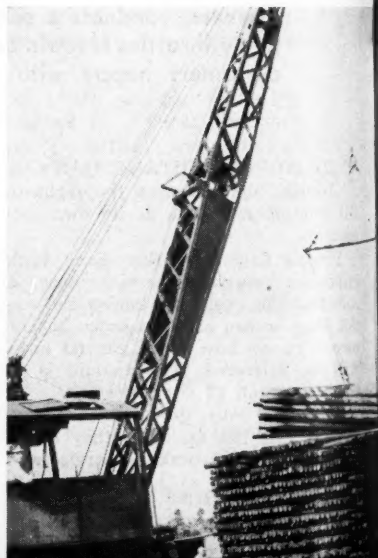
For this reason the Joplin Butane Gas Co. has a close knit sales organi-

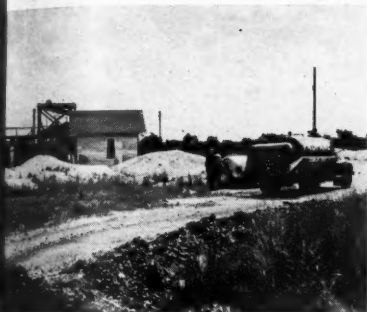
zation. Mr. Turner and Mr. Taylor make most of the sales, the former taking care of the outside phase of selling and the latter taking care of floor customers.

Close by—just out of the company's territory, a high line went through. One local electric appliance dealer sold a hundred electric ranges along the line the first month.

"We have never lost more than 2% of our customers to a high line," Mr. Taylor said. "And the majority

This crane is operated by LP-Gas. Formerly cranes in this yard utilized steam—coal and wood being used. That meant firing up at 4:30 a.m. Now the operator comes to work at 8:30, steps on the starter, and he is ready for business. All 8 cranes in the yard are scheduled to be converted to utilize LP-Gas. This is a Long-Bell operation serviced by Joplin Butane.





Above: LP-Gas cuts maintenance costs for this Joplin mine operation shown being serviced by a Joplin Butane Co. delivery truck. Below: All the equipment in this stone quarry is powered by LP-Gas—another Joplin account.

of those come back within a short time . . ."

"That 2%," he continued, "is about the average number that is susceptible to high pressure selling. You can see it doesn't pay off."

"They come back," he added, "when they learn there is no such thing as 'cool cooking heat,' the slogan on which they were sold . . .

plus their complete satisfaction with our service."

While working up their domestic business, Joplin Butane Gas Co.'s commercial accounts were not overlooked. Its customers use LP-Gas to operate heavy mining equipment, stone crushers, and cranes used to move telephone poles to be creosoted. While these are heavy users as far as volume is concerned, they do not constitute more than 20% of the total volume.

The company also services many large chicken and turkey brooder operations, numerous small saw mills, standby plants, tractors, trucks, and buses.

"We like our bottled business," said Mr. Taylor. "We have a modern bottling room for servicing our 6000 bottles. This takes care of some 2900 systems . . . each customer being supplied with two bottles which we lease out."

Weekly service is available to cylinder accounts.

The Joplin Butane Gas Co.'s record sheet covers 10 years. From this record, the exact operating cost of individual customers can be determined. The cost of operating chicken brooders, furnaces, hot water heaters, ranges, and almost any job done by LP-Gas is included. This record becomes a handy reference for future sales information. From these cost figures, Mr. Taylor has found that if a heat job is properly figured for heat loss and the appliance properly sized, the customer is happy and satisfied.

The service outlook has paid off in a healthy rise in sales for the fiscal year ending July 31, 1950. Month for month the increase was as high as 119% . . . the lowest month's increase over the same month a year ago was 30%. The total volume went well over a million gallons.



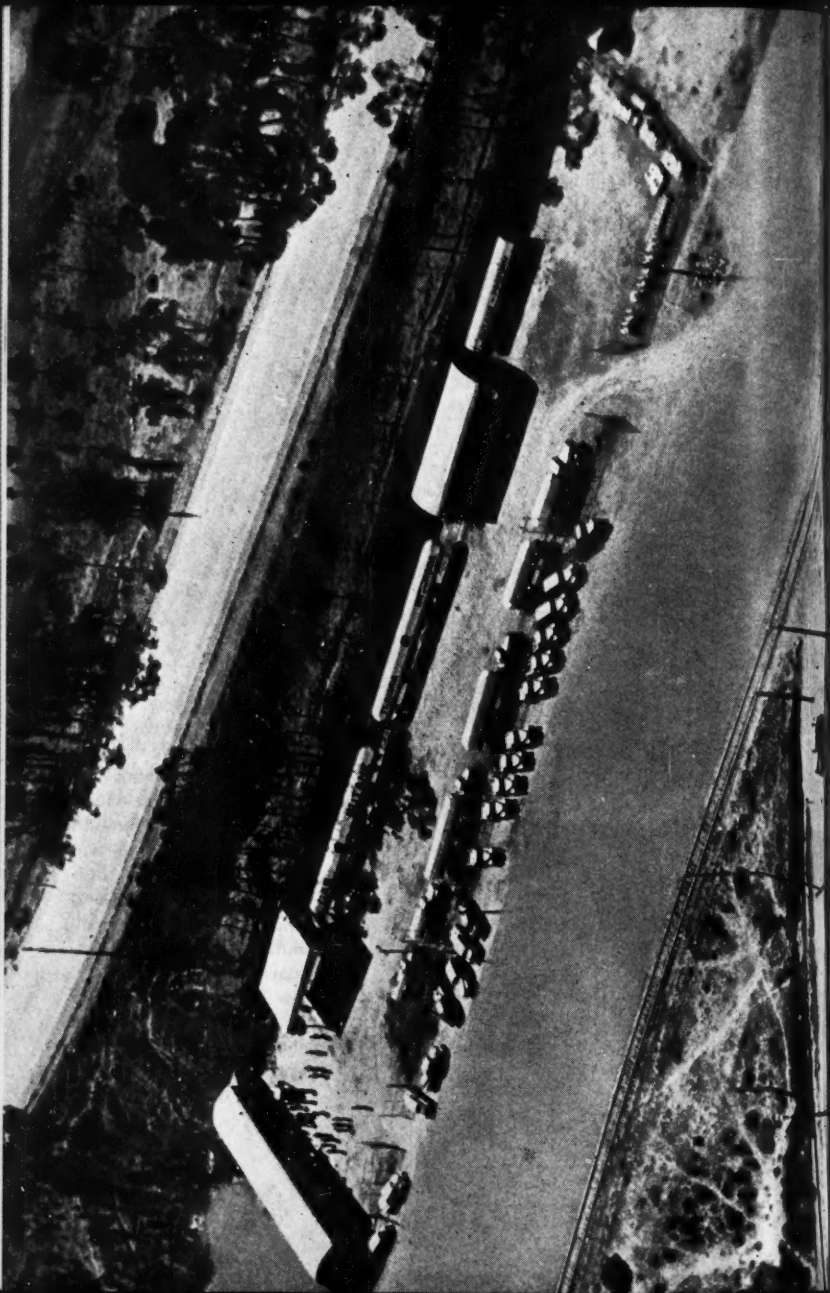
In England where automatic ranges, water heaters, irons, etc., have long been luxury items priced above the consuming public's ability to pay, LP-Gas is a smash hit. Today, a wide range of gas equipment is obtainable for the home, farm, and for small industry. Above is an exhibit of "Bottogas" installations at the Royal Welsh Agricultural Show at Abergale, North Wales, in July this year. In the foreground are portable water heaters for use on farms and dairies. In the center is a double "pistol" paint burner. Bottogas is distributed by Benn's Butane Gas Service, Mold, North Wales, operated by H. L. Benn. The company has engineered LP-Gas installations and traded in gas appliances since 1936.

LP-Gas Smash Hit in Wales

Bottogas business continues to grow in the face of expanding electrical service by the national Electricity Board. At right is a classic example of "It Can't Happen Here." It's a traffic signal lighted by butane. A list of equipment available at Benn's reveals the wide diversification of the English demand. Here's what you can buy at Benn's in the way of gas-operated equipment: ranges, hot plates, refrigerators, water heaters, wash boilers, irons, unit heaters, caterers' equipment, sterilizers, laboratory equipment, brazing torches, lighting equipment, plumber's equipment, regulators, couplings, copper tubing, gas pokers, soldering irons, blow torches, carburetors, engine conversion equipment, and trailer and yacht equipment.



At left is Benn's Butane showroom at Mold. The principal demand is for cookers and water heaters. In the Bottogas territory, cooking and water heating with butane is more economical than electricity. Mr. Benn states that while business is booming, ranges, water heaters, and refrigerators are in short supply.



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Mexican Firm Capitalizes Upon Tomorrow's Market Today

By DON B. SMITH

THERE has always been a good deal of talk about Mexico as "the land of tomorrow"—meaning that if the country to the south of the U. S. ever mobilizes its resources, manpower, and enterprise, it will become a big power in world commerce.

For Alfonso Bustamante, tomorrow has arrived. He has an LP-Gas business worth nearly a half-million dollars operating in Baja (Lower) California. The company, "Gas Butane," has had a phenomenal growth—much like the rapid expansion of many U. S. liquefied petroleum gas companies which started from nothing and rose to the high income brackets in but a few years.

Gas Butane was formed in 1940, on \$2500 supplied by Mr. Bustamante's father-in-law, Erasmo Anchondo. Four-and-one-half years later, Mr. Bustamante bought out the original investor, and had at that time about \$100,000 in physical assets. Today, assets total four times that amount. The company operates its main office in Tijuana,

and has branch offices in Ensenada, Tecate, La Presa, in addition to the facilities of an affiliate, Gas Mex, in Mexicali. More than 8500 customers are served by the company and new accounts average about 12 a day.

Gas Butane sells a complete line of appliances at the main office and through sub-dealers.

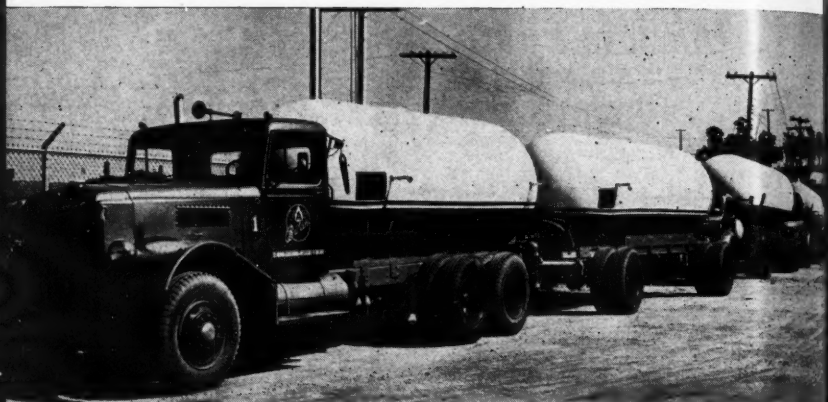
The company estimates that its appliance business is grossing about \$20,000 per month; gas purchases, obtained from C & S Petroleum Co. (Long Beach, Calif.), are in excess of 250,000 gals. per month.

Two-Way Radio Speeds Service

Gas Butane operates a two-way radiotelephone system between the main office, 24 delivery and bulk trucks, and the personal cars of Alfonso Butamante and his assistant general manager, Alfredo Gruel. The system is maintained 24 hours a day, 365 days a year. Three panel trucks, completely stocked with equipment and tools for replacements and repairs, give customers fast, efficient service.

The business keeps growing—

Left: Air view of headquarters and bulk plant of Alfonso Bustamante.



Tank trucks and trailers that supply Gas Butane, Tijuana, Mexico, with fuel from Los Angeles harbor district.

through the liberal use of radio and newspaper advertising and its reputation for fast, dependable service.

Has Large Investment

The company's rolling equipment includes three transports of 7500-gal., 5300-gal., and 4000-gal. capacities, manufactured by Superior Tank & Construction Co., Los Angeles. The storage facilities comprise two 20,000-gal. propane and one 10,000-gal. mixture tanks at the main Tijuana plant, and tanks with 54,000-gal. propane and 10,000-gal. mixture capacity at the branch offices. These were made by American Pipe & Steel Corp., Alhambra, Calif. All cylinders and bulk tanks are company-owned and all have recently been converted to propane.

G. E. Brett, Industry Pioneer, Dies in Arizona

One of the LP-Gas industry pioneers, and the first butane dealer to go into business in northern Alabama, died in Nogales, Ariz., in August. He was George E. Brett, Sr., 85, founder of Brett Butane Service in Birmingham, Ala., in 1934.

He had been retired from the business built by himself and his sons, and was living with one son, George E. Brett, Jr., in Arizona. Brett Butane Service and an affiliate, Brett Butane Co., operate in Decatur, Gunterville, Boaz, and Birmingham, all in Alabama.

Mr. Brett is counted among those who "helped build Birmingham," where he was a 33rd degree Mason and a Shriner, and a large property owner. After his retirement in 1944, the business was taken over by his sons, George E. Brett, Jr., and Martel H. Brett (present general manager).

Delivery Records Show Way To Future Profit

By L. M. GIBBS



WELL-MANAGED distribution can be the key to a more profitable LP-Gas operation. The first requirement of good management is a thorough knowledge of delivery costs.

Management must know the answers to the following questions, and to many more, if decisions are to be effective:

1. What is the cost of delivering a gallon of gas?
2. How much more does it cost per gallon to supply company-owned customer storage equipment than when it is owned by the customer?
3. How much more per gallon does it cost to deliver to 150-gal. tanks than to 320-gal. tanks?
4. Is it possible to compute the number of consumer gallons per year required to support a given storage size?
5. With a given volume of customer storage, what amount of consumption is necessary before per-gallon price concessions can be made?

The author reveals how hit-or-miss cost methods for bulk plant operations can be replaced by hard-headed cost techniques that will show a dealer exactly where he stands.—Editor.

Answers to these questions are only some of the cost techniques that can benefit LP-Gas plant management. While smaller plants may not want to go to the trouble and expense to determine cost data as accurately as will the larger operations, they will find it worth their while to develop basic "rule-of-thumb" applications.

Frequently, the effort to develop a cost system fails to produce a useful tool. In general, this failure is due to an over-simplified approach which avoids a comprehen-

sive review of available data. In the LP-Gas industry the larger number of variables poses a complex cost problem; but the complexity, itself, necessitates the solution—if management is to know what it is doing.

Cost data are most useful when they can be used to anticipate future expenditures, instead of merely to review money spent. Development of "costs-which-anticipate" (i.e., "standards") requires a thorough analysis of all business expenditures over a period of at least one year. In addition, hit-or-miss operating methods must be eliminated. Operating practices must be made consistent and uniform with much more accurate cost standards resulting.

Establishment of uniform accounting practices is, of course, a primary goal of this preparatory work. However, the resulting cost standards will be valid only for a continuation of the same operating practices from which the standards were derived.

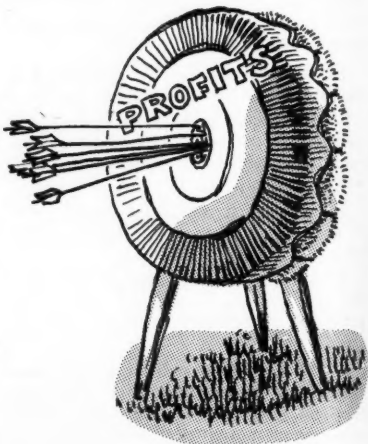
The ultimate goal of the analysis is to departmentalize the kinds of costs so that costs are known for each element of the operation.

For example, it is useful to know the cost only of owning trucks, regardless of miles travelled or gallons delivered. All fixed charges such as depreciation, insurance, taxes, licenses, etc., are brought together for this purpose. To bring out differences between drivers, to compare different makes of equipment, and for other reasons, maintenance charges are segregated

from other mileage expense (e.g., gas, oil, grease). Payroll taxes, employer insurance contributions, bonuses, sick leave pay, etc., should be combined with wages to obtain labor (driver) costs.

The method described has deliveries as its base; it attempts to combine the many delivery variables in an orderly development and to underline each variable's effect on net margin. This method will show the cost of owning a truck independent of the gallonage it delivers and show each truck's revenue potential. Most important, it will show the relation each element of direct cost bears to total cost, thereby guiding management in its selection of routes, equipment, prices, and practices.

Invaluable for valid costing of deliveries is a comprehensive delivery time analysis. This involves breaking the entire delivery process into its elements, establishing



standard procedures, and then assigning time standards to each element of the operation. (See *BUTANE-PROPANE News*, May, 1950, p. 72.)

Considerable thought should be given to the problem of how much overhead can be included consistently in determination of delivery cost standards. It is possible, of course, to include all administrative expense, although the resultant figures would not be valuable as strictly delivery figures. If all elements of administrative expense were prorated to the trucks (and to other sources of income such as appliance sales) in proportion to their revenue producing potential, they would probably overbalance the strictly delivery expenses. Moreover, administrative charges are not controllable by delivery management.

Accordingly, one of the prime reasons for defining costs, that of assigning responsibility for costs to those who have control over them, is lost. So, it is usually desirable to include in delivery expense only the administrative charges that are variable with delivery conditions. Examples of these might include salaries of clerks posting to route cards, salary of delivery superintendent, a portion of a branch manager's salary, pumping and delivery office equipment charges, amortization of company-owned customer storage equipment, etc.

Expenditures under the following heads have been included in the analysis of a 130-truck branch operation:

Administration Expense

- Clerical payroll (%)*
- Supervisory payroll (%)
- Depreciation-Office Equipment (%)
- Depreciation - Customer Storage Equipment (%)
- Maintenance-General
- Sick Leave Payroll (%)
- Employee Bonuses (%)
- Employer's Insurance Contribution-Voluntary (%)
- Employer's Tax Contribution-Mandatory (%)
- Travel Expense (%)
- Telephone & Telegraph (%)
- Heat, Power, & Water (%)
- Office Supplies (%)
- Interest Expense (%)
- Taxes—Personal Property (%)
- Taxes—Real Estate (%)
- Licenses (%)
- Insurance—Delivery & Yard Equipment
- Insurance—Product Liability
- Insurance—Other (%)

Yard & Delivery Expense

- Depreciation-yard equipment
- Depreciation-delivery equipment
- Maintenance-Delivery Equipment
- Maintenance-Yard Equipment
- Mileage Expense-Delivery Equipment
- Maintenance - Customer Storage Equipment
- Payroll-Drivers
- Payroll-Yard and Delivery Maintenance
- Payroll-Service (%)
- Installation Supplies (%)

Information from this analysis was developed into the following "Delivery Cost Summary," as

* Where "%" is indicated the proportion chargeable to delivery was arbitrarily established. Adjustment was made for servicemen performing occasional delivery functions, for drivers performing certain sales duties, etc.

Table 1. Delivery Cost Summary

Item	Based on 1½-ton domestic bulk delivery*
Yearly fixed charges:	
Insurance, taxes, licenses, depreciation	\$1500
Other overhead charges	5000
	<hr/>
Yearly total fixed charges	\$6500
(Fixed charges per day, 260 days per year—\$25)	
(Gallons required to cover fixed charges @ 6c per gal. average gross margin—417 gal.)	
Delivery time analysis (1½-ton domestic bulk delivery)	
Available working time per year, 8 hours per day, 5 days per week	2080 hours
Deduct: Maintenance time allowance	100 hours
Lost time allowance	150 "
Driver clerical allowance	90 "
	<hr/>
Net available delivery time	1740 "
Fixed time per customer:	
Avg. load per customer	50%
" customer storage	200 gals.
" gallons per fill	100 "
Pumping time per fill—load and unload 100 gal.	5.3 minutes
Travel time @ 5 miles per customer	11.0 "
Fixed time per customer	5.5 "
	<hr/>
Avg. total time per fill	21.8 "
Therefore: Available time	1740 hours—4830 fills per year,
Total time per fill	36 hours—18.6 fills per day

Margin computations (1½-ton domestic bulk delivery)
 Ave. total gallonage delivered per truck per day:

Margin computations (1½-ton domestic bulk delivery)
 Avg. total gallonage delivered per truck per day:
 18.6 fills @ 100 gal. per fill 1860 gallons
 Deduct gallonage to cover fixed costs (above) 417 "

Remainder for mileage expense, delivery costs, profit. 1443 " \$86.58 per day
 Extend, with avg. gross margin @ 6¢ per gal. \$61.38**
 Deduct variable daily delivery costs:
 Driver wage \$12.00
 Maintenance 5.50
 Variable delivery overhead 4.00
 Gas, oil—93 miles @ 3.5¢ 3.25
 Potential daily net delivery margin per delivery unit. 24.75
 \$61.38**

* Similar figures are developed for other standard size trucks.

** Non-delivery overhead yet to be deducted.

shown in Table 1. (Figures shown are hypothetical.)

Deriving a "potential" net operating margin per truck has the merit of establishing a clearly defined operating goal. Operating data for instances of lesser achievement can be reduced to the lines of the outline for management's ready definition of the weaknesses. The several variables are apparent: price per gallon (gross margin), size of customer storage, supervision and methods, routing and scheduling, adequacy of load.

Note that "Fixed Charges" develops gallonage that has to be delivered to offset fixed expenses. Whether a company is "topheavy" frequently can be determined from this figure, alone. There may prove to be too little load to support all the "brass" along with the fixed expenses.

"Delivery Time Analysis" figures shown in Table I indicate not only effective standardized methods and routings but also elastic customer filling-billing conditions and enough tanks to fill to require full utilization of truck and driver. Most operations do not boast all of these attributes. Therefore, they will usually show either a lesser "available net delivery time" figure, a higher "time per fill" figure, or both.

Whatever figures an operation shows with this type of breakdown, management can focus attention on the precise sore spot:

No point in juggling price if scheduling factors or deficient customer storage are the basic faults.

No point in trying to squeeze

1/2-cent a gal. out of delivery costs if adjustment of prices will add 3/4-cent per gal.

A high "miles-per-gallon-delivered" ratio might precipitate a campaign to build load in appropriate areas to reduce this ratio.

A low "gallons-per-fill" figure might produce a decision to increase the size of customer storage.

High maintenance figures precipitate review of maintenance practices and suitability of equipment.

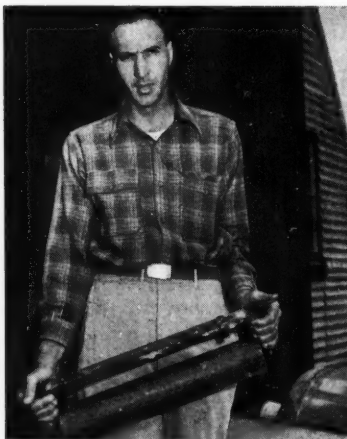
In general, management finds that this method of analysis enables it to focus responsibility for the several delivery variables, as well as to concentrate one at a time on the various delivery problems indicated.

Scouts Fill Up on Hot Dogs Cooked By LP-Gas

Fifty thousand boy scouts ate six miles of frankfurters and eight tons of meat for hamburgers at their big jamboree in Valley Forge, Pa., in June, and every scrap of it was cooked on LP-Gas appliances fired by LP-Gas.

There were five "trading posts" in the jamboree area; each had a four-tank automatic installation connected to steel griddles. All were supplied by the Natural Gas Co., Philadelphia, and were supervised by Samuel L. Glickman. Gas was metered.

Thirty thousand meals were served with the equipment during the seven-day festival by the Slater Cafeteria System, of Philadelphia.



A roller, made from 3-in. pipe, helps Ward's Propane Service, Highway 199, North Crescent City, Calif., handle tanks in tight spots or over lawns. In photo at left, Maris Ward, partner in the firm with his father, Leo Ward, shows a 24-in. roller that simplifies handling operation. Right: Mr. Ward shows how quickly his roller can be attached to tank.

IOWA POULTRYMAN HAS TRIED THEM ALL

"GAS IS THE BEST."

By RICHARD FINCHAM

"**S**AFETY and economy are the two big reasons why I use bottled gas to heat my baby chicks," says H. S. Nelson, Ames, Iowa, poultryman.

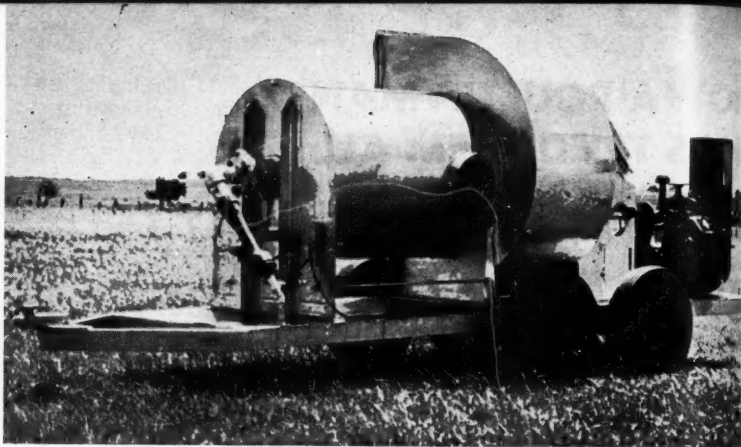
During the cold Iowa weather of last February and the first part of March, his gas costs averaged approximately \$12 per week for six 10'x16' brooder houses. Then after about four weeks, when the chicks were larger and the weather warmer, costs dropped to \$6 per week. He was able to discontinue the use of heat by the first week in April.

Mr. Nelson has devised a practical plan for using the gas system to heat his 1800 baby chicks each year. He has grouped his six brooder houses so that the bottled gas can be supplied from centrally located cylinders. There are four of these in the unit but only two are used at any one time. They are equipped with automatic switch-over equipment which goes into operation when the first two bottles are empty or too low in fuel to not vaporize sufficiently. The houses are connected to the main supply by 140 feet of 3/4-inch steel pipe.

Mr. Nelson says he has used several different types of fuel in his experience as a poultryman, but has found none that can compare to gas. Electricity fails to dry the litter properly and coal or fuel oil gets so hot that there's considerable fire danger.

H. S. Nelson, Iowa poultryman, checks the gauge on the cylinders which supply his brooder houses with gas each spring. Mr. Nelson broods approximately 2000 chicks per year.





Dealers and Farmers Both Profit From Crop Drying Operations

By CHARLES F. BISHOP

Chief Engineer, Southwest Industrial Heating
Engineers, Navasota, Texas

Mr. Bishop's last article in BUTANE - PROPANE News ("Another Summer Load Builder Lies in Portable Crop Dryer," June 1950, p. 37) inspired so much reader comment that the editors have requested him to explain his product and its potential farm uses more in detail.

LIQUEFIED petroleum gas dealers, ever in search of the load factor that will bring the summer-winter cycle into a more perfect balance, may well find that LP-Gas-

fired, crop-drying equipment is at least part of the answer in rural areas.

The use of LP-Gas for power—as a fuel in tractors, trucks, buses, and engine farm equipment—has received much attention and publicity within the industry of late; but crop-drying applications of butane and propane are likely to prove

View from burner end of F-240 used
on Siler farm.

Manure drying with a Farm-Mor F-110. Bin is made airtight by lining it with ordinary building paper.

an important contributor toward load building, also.

Most crop-drying operations in the rich Middle West farming area have utilized oil as the heating fuel—and farmers have been amazed in many cases to learn that the job can be better controlled, a cleaner result obtained, and ton-for-ton cost reduced with butane or propane. At first glance, it appears that the farmer is the one to gain most by application of LP-Gas to his crop-drying operations.

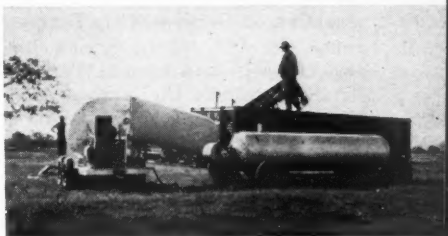
Crop dryers accomplish two main purposes. First, they enable the farmer to harvest his crops when they are at exactly the right stage, regardless of weather, and make it possible for him to do it at the time the market price is up. Secondly, and equally important, they enable him to harvest a much better crop as it can be taken before the weather and insects have had a chance to deteriorate the quality of it.

But the dealer, too, is greatly benefited by the new market for his gas, and he can give a big boost to his good will in his community by introducing LP-Gas dryers that will do a better job cheaper. Portable drying units, fired by butane or propane, are another source of dealer profit. Many dealers are operating the movable units on a lease basis with nearby farmers.

A good example of the value that portable LP-Gas crop-drying units



Farm-Mor F-240 at work on the Gordon Siler farm. Note 500-gal. tank mounted on trailer, for easy movement about the farm.



All-LP-Gas setup at Ballenger Farms in Sebastian, Texas. Connections to the drying bins are quickly made by means of a canvas duct.



DRYING SCHEDULE

CROP	MOISTURE CONTENT FOR STORAGE	TEMPERATURE* RANGE
GRAINS	12 - 14%	160 - 180°F
PEANUTS	10 - 13	118 - 125
PEANUT HAY	15 - 20	168 - 184
RICE	12 - 14	110 - 120
EAR CORN	13 - 15	115 - 125
HAY	15 - 20	168 - 184
RESCUE GRASS	12 - 15	125 - 130
HEGARI	10 - 15	150 - 170
MARTIN MILO	10 - 15	150 - 160
SWEET POTATOES	10 - 13	125 - 135
OATS, THRESHED	10 - 13	150 - 160
CLOVER SEED	11 - 13	115 - 120
ALFALFA	10 - 15	168 - 180

*TEMPERATURES NOT FOR GERMINATION

are bringing farm areas is the operation of Gordon Siler, Temple, Texas. In addition to drying his own crops in and around Temple, Mr. Siler follows the harvest with his combines and corn pickers, traveling north as the crops ripen. As he enters each community for several days' operation, he makes arrangements with the local LP-Gas dealer to rent him a 500-gal. tank and furnish the fuel. His dryer is in operation from 18 to 24 hours per day and uses about 15 to 18 gals. per hour, which means a nice piece of business for the dealer.

His equipment consists of one "Farm-Mor" F-240 portable unit,

plus two drying wagons, with screened bed 8 ft. x 20 ft. In addition he has his combines, corn pickers, and other necessary equipment. While one drying wagon is attached to the Farm-Mor unit by a canvas duct, the other is being filled from the combine or picker, depending on the type of crop he is harvesting. This dryer, which is driven by a 4-cylinder, air-cooled engine equipped with LP-Gas carburetion, is completely automatic in operation and equipped with safety and temperature control equipment. The operating costs for the burner and engine average less than 40 cents per ton.

That farmers may increase the return on their crops with portable butane or propane drying units is shown by the experiences of the J. P. Ellis farm near Bayview, Texas. According to the farm manager, Charles T. McCaleb, the grain was taken to a commercial dryer last year where charges were 15 cents per cwt. for drying. (This year's price is 20-25 cents.) In addition to drying, there was a hauling charge of 20 cents per cwt. each way, making a total of 55 cents. This year's crop was dried with a Farm-Mor F-85, using the wagon method, at a total operating cost of 34 cents per ton! Production rate was 1½

FARM-MOR DATA TABLE

MODEL	C. F. M. @ 1" S. P.	H. P. OF MOTOR	TEMP. RANGE	BTU @ 70° F RISE	MOISTURE* REDUCTION OF 7% LOOSE DRYING	SIZE L - W - H	EST. WGT.
F - 75	7.681	2	225° F	672,000	1 Ton/1 Hr	84" x 48" x 30"	1000#
F - 85	8.788	3	"	769,000	1½ Tons/1 Hr	96" x 48" x 48"	1200#
F - 130	13.110	5	"	1,147,000	2½ Tons/1 Hr	96" x 48" x 54"	1450#
F - 220	20.200	7½	"	1,760,000	4 Tons/1 Hr	119" x 54" x 63"	1600#

*IN BINS BUILT TO OUR SPECIFICATIONS

DRYER AND BIN SELECTOR CHART

TYPE BIN	MIN. CFM/AIR S.F. AREA	FARM-MOR F - 75	FARM-MOR F - 85	FARM-MOR F - 130	FARM-MOR F - 220	CROPS SUITED FOR EACH BIN
COLUMN TYPE BATCH LOADING	80	2 COLUMNS 6'-HGT-LAT-W HOLDING 3000 # GRAIN	2 COLUMNS 6'-HGT-LAT-W HOLDING 3000 # GRAIN	2 COLUMNS 7'-HGT-LAT-W HOLDING 3750 # GRAIN	2 COLUMNS 10'-HGT-LAT-W HOLDING 13,400 # GRAIN	1 - 2 - 3 - 4 - 7 8 - 9 - 12
SACK TYPE HORIZONTAL 13" x 26" OPENINGS	80	80 SACKS	73 SACKS	109 SACKS	188 SACKS	1 - 2 - 3 - 4 - 5 7 - 8 - 9 - 10
HORIZONTAL SCREEN TYPE	50 70	144 S.F. 120 " 105 "	175 S.F. 146 " 125 "	262 SF. 218 " 187 "	404 S.F. 336 " 290 "	1 TO 12
SLATTED FLOOR TYPE		SAME AS SCREENED BIN TYPE				1 TO 12

1—GRAIN SORGHUMS

2—PEANUTS

3—RICE

4—GRASS SEED

5—EAR CORN

6—BROOM CORN

7—ALFALFA SEED

8—SHELLED CORN

9—OATS

10—SWEET POTATOES

11—HAYS

12—APPLES

tons per hour on a 5 to 6% moisture reduction.

A Sebastian, Texas, all-LP-Gas installation has had marked drying success also. Employing a Farm-Mor F-220, they have a unique setup using a skidded model mounted on one of their own 4-wheel trailers. The trailer was large enough to accommodate a 500-gal. tank, and the whole setup is easily moved from one drying bin to another. Connections to the drying beds are made by portable canvas ducts. This dryer has consistently handled better than 50,000 lbs. per day while drying maize, and can also be used for alfalfa.

Another interesting drying operation is the reduction of the moisture content in cow manure. Cow manure is being treated at 200°F and reduced to less than 15% moisture content. It is allowed to stand in its natural state for several days until the moisture content reaches the vicinity of 30%. It is then run through a hammer mill to break it into smaller pieces and put on the drying screens. Not only

does the heat dry it to the desired content but it also kills wild seed germination and harmful insects, permitting sale to nurseries and greenhouses with the guarantee that it is free from harmful weeds and seeds.

These are just a few case histories from a file of successful installations. Other drying successes have occurred with peanuts, rice, sweet potatoes, nuts, seaweed (for fertilizer). All kinds of hay can be cured either while in storage or before storing. Many farmers like to use the baled hay method. While this takes a little longer, they feel that the handling charges are less.

Every farmer who sells his crops on the market is paying for drying, whether or not he realizes it. We refer to the system of dockage for excess moistures. For example, a farmer bringing maize in at 18% moisture content is usually docked

The accompanying tables, showing drying schedules, capacities of various sizes of dehydrators, and dryer and bin information, were prepared by the Southwest Industrial Heating Engineers.

at the rate of 5 cents for every point of moisture in excess of 14% per 100 lbs. As this is a loss of 20 cents per hundred on 18% moisture, it is easy to see where he can soon pay for a dryer that can handle it at 35 to 40 cents per ton.

With the tightened war situation, the farmer who can not only produce but also save his crops, will obtain the best market prices. We know that the LP-Gas industry as a whole has a good future in this field, for no other portable fuel in the world can do such an outstanding job on dehydrating processes.

Farm-Mor dryers are available in four standard sizes that handle the needs of most farms, but can be had in either larger or smaller sizes.

The smallest standard model handles about one ton per hour of such crops as grain sorghums, corn, rice, peanuts, soy beans, etc., on a

5 to 6% moisture reduction. On a hay drying operation it will handle about 800 to 1000 lbs. per hour on a reduction of approximately 30%.

The other sizes are rated at 2, 3½, and 4½, respectively, on the 5% basis.

All models are equipped with temperature and safety controls and all that is necessary upon receiving them is to make fuel connections.

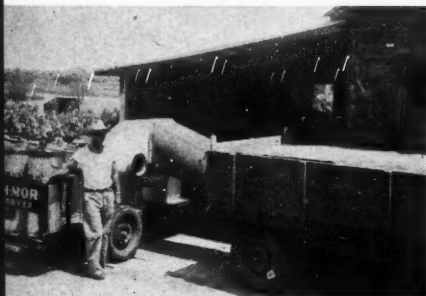
An example of the operating costs and how quickly they amortize themselves is shown in a recent installation. This was the largest size, an F-240. It is powered by a 4-cylinder, air cooled engine equipped with an LP-Gas carburetor. It is handling better than 4 tons per hour on a 7% moisture reduction and the burner and engine combined are using 12 to 13 gals. per hour of 80-20 mixture.

The operator is paying 10 cents for his gas, making a total operating cost of \$1.30 per hour. In tons, it is less than 35 cents per ton.

The owner (a commercial operator) contracted with a farmer to dry his grain right on the field, so he has his dryer, bins, and a 500-gal. tank right on the job. There is an estimated crop of over 1,000,000 lbs. of maize on his land. He has agreed to dry for 10 cents per 100 lbs. (they get 20 cents at commercial dryers and you have to haul it), which will bring him over \$1000 for the job.

It is estimated that it will take a maximum of 12 days for the job (10-hour day) and that his gas bill will be about \$156, and his labor for the operator about \$96, making

Drying maize on the J. P. Ellis farm at Bayview, Texas. Note converted cotton trailer which makes an ideal drying wagon. The three 100-lb. cylinders furnish a 2-day fuel supply.



a total expense of \$250, and a net profit of about \$750, or better than one-third of his investment returned the first weeks of operation.

The best part of the above is that it benefits several people. The farmer saves a lot of expense through the elimination of hauling charges, the operator makes a good profit, and the LP-Gas dealer sells a nice gallonage for the duration. Of course, if the farmer happens to be the owner, he is that much ahead. We have even tried to interest LP-Gas dealers in having outfits to rent out on a contract basis as it would certainly be to their advantage.

These examples serve to emphasize the big versatile job to be done in farm crop drying by LP-Gas. No other fuel can be used portably to such an advantage or with such

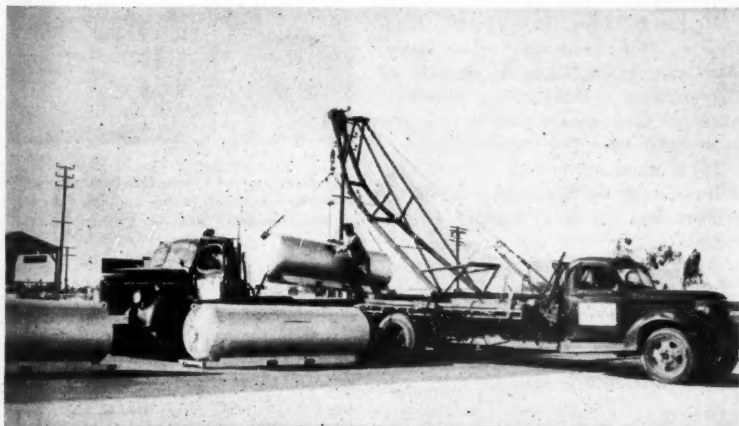
efficiency in this basic rural job. It remains for LP-Gasmen to invade the big potential of crop drying and to establish LP-Gas drying as an accepted farm practice.

California Propane Skid Tanks Bound for Puerto Rico

Destination . . . Puerto Rico. That was the bill of lading on four 500-gal. propane tanks recently loaded for transportation to Long Beach, Calif., from where they went by ship to the Caribbean via the Panama Canal.

The fuel and skid tanks were sold to a Puerto Rico client by the Anchor Petroleum Co. They are shown in the accompanying photograph after being filled in the Inglewood, Calif., plant of the Mutual Liquid Gas Co.

When loaded each skid tank weighs 4200 lbs.



Three of four propane skid tanks on ocean shipments to Puerto Rico from California.

Features Appliance Sales To Keep Cash Coming In

MMOR-GAS, propane gas service of Ventura, Calif., successfully combines fuel sales with an appliance business that includes both LP-Gas and natural gas users.

R. E. Morter, owner of Mor-Gas, believes that a large display of both lines (liquid and natural gas) creates a greater showroom sales volume. Secondly, when a customer switches to natural gas he continues to buy appliances at the same familiar stand.

Dual Sales Showed Up Best

Before Mr. Morter began business four years ago he made a survey in the southern and middle California areas and found that those companies that combined appliance sales with the sale of the fuel were the most prosperous.

He has followed that principle from the beginning and was never sorry. Appliance sales help pay his way in the summer months. They also balance his crew to the extent that the same staff operates year-round.

In a summer month Mr. Morter will sell between 8 and 10 gas refrigerators and an equal number of gas ranges.

Appliance sales are a cooperative affair at Mor-Gas. Everyone at the plant sells appliances, and gas systems, too. Mr. Morter sells appliances and does service work. Mrs. J. K.

Hollingsworth, office manager, drums up sales by phone contacts and during over-the-desk payments. Her husband, J. K. Hollingsworth, sells, delivers, and services.

Mr. Morter promotes sales of appliances with newspaper advertising. He uses suppliers' mat services and takes advantage of the cooperative advertising pay plan offered by manufacturers. Several times a year he



R. E. Morter and Mrs. J. K. Hollingsworth examine a range in the appliance display department of Mor-Gas, Ventura, Calif.

contacts his customers by direct mail.

Leads for appliance prospects come from his own active customers. These customers receive a utensil or other useful kitchen item as a gift when he completes a sale to one of their leads.

By JOE BAER

Gas Users Increase 57.1% Since 1940

A TREMENDOUS expansion in the number of gas users in the United States is vividly portrayed in a recent release by the Gas Appliance Manufacturers Assn. which is based upon the 1950 census. Electrical growth is also shown.

According to a Sept. 6 GAMA bulletin prepared by Edward R. Martin, population of continental U. S., 1950 over 1940, has increased 18,160,100 (13.8%) and now totals 149,829,400.

Residential gas utility customers, on January 1, 1950, totaled 21,933,000, an increase of 33.5% over the number served on the same date of 1940. Including LP-Gas residential customers, and looking at the gas industry as a whole, on Jan. 1, 1950, there were 27,083,000 residential gas customers, an increase of 9,848,000, or 57.1% over the residential gas customers of Jan. 1, 1940.

During the same period, residential electric customers increas-

TABLE 1.

	1950	1940	Increase	
			Actual	Percent
Population	149,829,400	131,669,300	18,160,100	+ 13.8
Occupied dwellings	42,100,000	34,854,000	7,246,000	+ 20.8
Residential gas customers as of Jan. 1				
City	21,933,000	16,435,000	5,498,000	+ 33.5
LP-Gas	5,150,000	800,000	4,350,000	+543.8
Total	27,083,000	17,235,000	9,848,000	+ 57.1
Residential electric customers as of Jan. 1	37,179,700	24,599,300	12,580,400	+ 51.1
Residential gas customers as of Jan. 1—percent of occupied dwellings				
City	52%	47%		
LP-Gas	12%	2%		
Total	64%	49%		
Residential electric customers as of Jan. 1—percent of occupied dwellings	88%	71%		

ed 51.1%, or 12,580,400, and on Jan. 1, 1950 totaled 37,179,700.

Latest estimates indicate there are 42,100,000 occupied dwelling units in the U. S., 7,246,000 units, or 20.8% more than in 1940.

The figures in Table 1 illustrate the actual growth of gas service over the past 10 years as compared with the number of occupied dwelling units, 1950 and 1940.

It should be noted that today 64% of the total occupied dwellings have gas service, and that in 1940, the figure was 49%. The forward stride of the LP-Gas industry is illustrated in noting that in 1940 only 2% of the total occupied dwellings used LP-Gas for residential purposes and today this figure has risen to 12%.

Arkansas Management School Completes First Phase

Films, conferences, discussions, demonstrations, practical visual aids, and special lecture methods were used at the first of a series of Management Institutes inaugurated by the Arkansas Butane Dealers Assn. and the vocational education division of the Arkansas State Board of Education and conducted at the Hotel Lafayette in Little Rock, July 10-15.

Closely paralleling the management courses offered by the Texas Butane Dealers Assn., the course trains top

management personnel, owners, and supervisors of LP-Gas firms in employee selections; training employees in selling, installing, and servicing LP-Gas systems; selling, installing, and servicing appliances; and employee supervision for economical, efficient, and safe operation.

Following the initial course, subsequent institutes will be held at Magnolia A&M College, Arkansas Polytechnic, Monticello A&M, the University of Arkansas, and Arkansas State College, of Jonesboro. Enrollment at each institute will be limited to 20 and each course will require 5½ days to complete.

Chairman of the education committee of the association is Alex S. Hill. Heading the staff of instructors is J. C. Ruppert of the distributive division of the department of education. Chief assistant is Olen Grounds, former LP-Gas dealer and later a member of the state education staff in Texas. Other staff members include M. L. Blair, chief inspector of the boiler division; Kenneth Lewis and Milburn Adams, department of education members; Carle S. Smalley, training director of the State Fire Prevention Assn.; and experts in the fields of education, business, fire prevention, safety, and management.

The first of a series of local classes for employees was held early in September. Future courses for management include accounting, appliance merchandising, credits and collections, advertising, and public relations. Present plans call for the program to be on a continuous basis.

In testimony of the success of the first school, the 14 managers and operators who registered for the Little Rock session made arrangements for their employees to attend later schools and guaranteed that associate owners and managers would attend following management courses.



M. L. BLAIR

Service, Safety, Sales

Part 3.

2. THE APPROACH.

Since your product and equipment and the appliances necessary to a complete and adequate service appeal to one or more of the four desires, previously mentioned, your further action depends on the proper approach.

If you are acquainted with your prospect, this is relatively simple, and full presentation of your sales story should be assured. If not, you cannot give too much care to a full study of the method and manner of this approach. Even then puzzling situations develop, and frequently the most carefully planned approach fails of its purpose—a sale. Here again, the card index file on all existing customers as well as prospects, as previously mentioned, will prove of great value.

The approach should always be planned, at least in the case of a new prospect, on the theory that he or she is primarily interested in his or her own business or home, its appearance, its comforts, its prosperity, and is on the defensive against any suggestions that will involve additional outlay of money or distraction of his or her attention from the things he or she is already well pleased with. Every normal human being, however, is

susceptible to sincere praise of the appearance of order and neatness, prosperous production of home or farm or business.

The properly prepared salesman will sense outstanding features of the above nature that are in evidence in every place of business, on every farm, in every home that is a worthy prospect for his service. Thus, he will appeal to his prospect's innate sense of pride, possibly by the greeting:

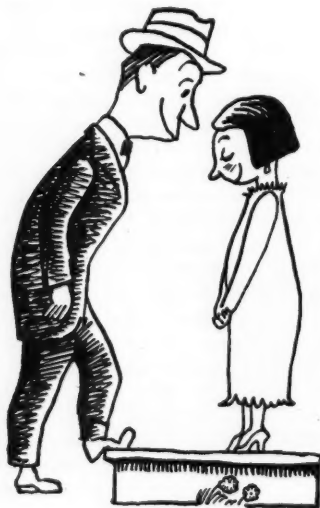
"Mr. Brown, it is plain to be seen, from the appearance of your farm (or plant) that you are a successful farmer (or business man) and that you take pride in doing things in the modern manner." Or, "Mrs. Jones, I can see that you not only take pride in the appearance of your home, but that you are interested in having those things which add to the comfort of your family and make for greater leisure, in fact better living. In this connection, I believe we have something in common. It's my job to help folks like you to maintain not only their present standard of living but to do this with greater convenience (or profit) to them."

Making such an approach with sincerity (using your words not ours), you are paying your pros-

By **KEITH CLEVENGER**
Sales and Economic Consultant,
National L-P Gas Institute,
Tulsa, Okla.

pect a dignified and deserved compliment. This indicates that you appreciate the same things he or she does, and more, that you are offering positive proof of your preparedness to help the prospect maintain and improve his business or farm operations, or her home-making and living conditions.

Whatever the predominant characteristics of the prospect's business, farm or home may be, you may be sure he or she has a reason for them and is proud of it. Therefore, any approach that indicates sincere appraisal and appreciation of such characteristics is most like-



"Every normal human being is susceptible to sincere praise."

ly to secure favorable interest and attention.

Sometimes, when it is evident that a prospect is worried with petty details of business or home conduct, it is much better to avoid a call unless you are possessed of the knowledge and experience that will be of real assistance in solving the current worry. Many a salesman has created a lasting and profitable account by offering and rendering some relatively simple service to a puzzled prospect.

On the other hand, some salesmen have lost what otherwise would have become good and continuing business by thoughtlessly or selfishly insisting on attention from a worried and distracted prospect or customer. The unwritten rule in a case such as this should be for the salesman to get as far away as is possible, and thus be able to come again, another more favorable day.

We think of two examples of how LP-Gas sales have been successfully handled and these perplexities avoided.

One very successful dealer of our acquaintance never drives out through the countryside in plowing or harvest season that he does not have a competent farm-hand with him. When he stops to talk to a farmer prospect who is hurrying to get his fall plowing done or his alfalfa cut, or whatever the field operation may be, he has his companion take over the job while he and his prospect sit and talk. In this manner no time is lost in the field, his farmer friend gets a brief rest, and the dealer has the oppor-

Occasionally a surly, or "defensive" type prospect can be taken out of such an attitude by a bit of prompt thinking — thanking the prospect for the privilege of the interview, complimenting him or her on some seldom-noticed detail of business or home, or the use of some impromptu, but to-the-point remark that catches the prospect "off-guard." We once had such an experience with a man who pretended not to notice our entrance—his back turned to us in apparent study of some report. This we had



Sometimes when a prospect is worried with petty details, it is best to avoid a call.

been advised was a pose he frequently assumed. We waited briefly (it seemed like ages) and finally he whirled and barked: "Well, what do you want?" We replied calmly and pleasantly, "The same courtesy you would expect if you were in my place." It worked. We had a most satisfactory interview, and never

again did we fail to receive courteous and favorable attention when calling on this man.

On another occasion a prospect who informed us both by words and attitude that he had little or no time for our proposition reacted promptly and pleasantly when we commented on the beauty and simplicity of a single white rose in a vase on his desk. He told us he had placed a fresh, white rose in a vase on that desk every day since his wife had died, some four years previous. Evidently he was deeply appreciative of our notice of this evidence of his devotion to his late wife's memory for he had plenty of time for our story, and became, and is still, a good friend.

Pictures on the wall, ornaments on a desk, many things of this nature, indicating a prospect's evident outside interests, hobbies, etc., give hints of various methods of effective approach.

As you progress in acquaintance with your customers and prospects you learn their many peculiarities and traits, likes and dislikes, and how to deal with each one. By the same token, if you properly analyze and serve these personal characteristics, their owners come to respect and trust you.

With some the approach must be brisk and to the point without being brash or cocky. With others it may be a matter of much listening and little talking on your part. With still others it may include help in the solution of some problem, possibly one that seems foreign to the nature of your call.

Whatever the line of approach,

if you analyze it thoroughly, you will find that in every instance it is related to one or more of the BASIC HUMAN DESIRES previously mentioned. Therefore, when planning your approach to new prospects you should consider which of one or more of these "basic human desires," or reasons for buying, you must appeal to, and be prepared at a moment's notice to change your planned method of approach to meet the current situation.

Alertness tempered with courtesy, persistence tinged with patience, and wit leavened with good humor and understanding of human behavior are the precision tools of a good salesman in his approach to and presentation of his sales story.

No successful salesman can be less careful and intelligent in the presentation of his story than he has been in its planning and his approach to the prospect.

3. THE PRESENTATION.

The presentation, like the approach, must be prepared and offered in terms of its advantage in the satisfaction of one or more of the four basic desires that motivate human beings. In fact, the presentation is so closely related to the approach that it is frequently difficult to determine where one begins and the other ends.

You should not approach the prospect merely with something you want to sell, but rather with

something he or she needs to provide greater comfort, assuage pride, protect investment or increase profits in the home, on the farm, or in his business. If you do not have a proposal that will accomplish one or more of these four results you had best not make even the approach.

Quite naturally, you are the only one who knows of these advantages, and your understanding of your product and/or service and how it will best lend itself to the successful conduct of his business or farm, or her home, presented with enthusiasm and conviction, is now the only reason for your admission. Had the prospect known all this in advance your visit would be unnecessary.

You should therefore make your presentation fit your approach. You will have arranged your facts and figures, the pictures and drawings of the equipment you desire to present and how they will meet the desires of your prospect in proper and convincing order. Usually you will give the entire sales story.

There may be occasions, however, when you will see that the presentation of only a part of your story will be more helpful. So much depends on the attitude of the prospect. Some want to go into great detail. Some are well enough informed through general advertising or previous contacts with your firm that to go into too much detail amounts to an insult to their intelligence and interest. Here again, the salesman must be alert and conscious of the prospect's attitude, analyzing, as he proceeds with his

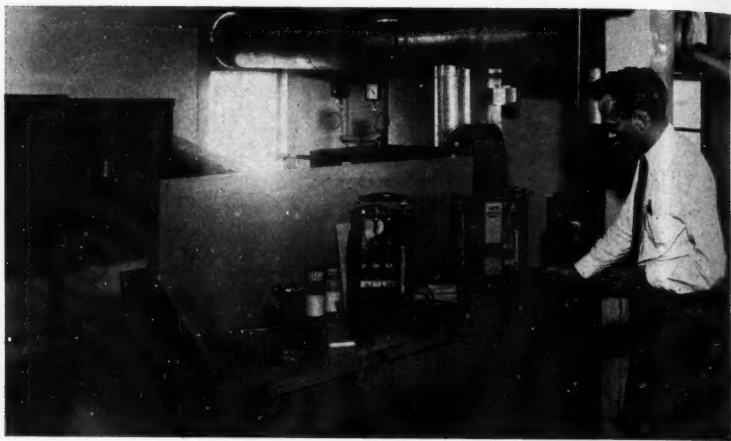
description, every word and attitude of his prospect—favorable and unfavorable—so that he may arrive at the peak of his sales story with the most possible success and the least possible waste of his or his prospect's time.

Merchandising Kits Tie In With Promotion Program

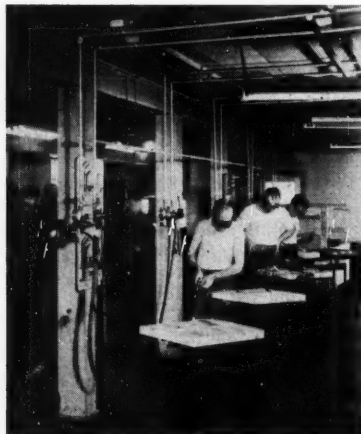
With the mailing to more than 8600 marketers in all parts of the country of merchandising kits which enabled them to tie in with the national theme in their local advertising and publicity, the big LP-Gas promotional program really got down to the "grass roots" in August.

These packages contained free advertising and publicity materials for immediate use and samples of others that can be purchased in quantity at moderate cost. In the former category were a huge colored poster, three radio commercials and two "pattern" press releases. In the latter were a proof of a newspaper mat, a postcard, envelope stuffer and mailing folder. Members of the promotional program can buy these items at a 20% discount as a result of a recent partial subsidy agreement made between the National Committee for LP-Gas Promotion and the Beals Advertising Co., Oklahoma City, Okla.

The national promotion is under the triple sponsorship of the Liquefied Petroleum Gas Association, Gas Appliance Manufacturers Association and Natural Gasoline Association of America. It is a three-point project embracing advertising, publicity, and, eventually, employe training. Advertising has already appeared in 45 publications reaching small town, suburban, farm and commercial LP-Gas markets.



L. H. Taylor, head of the gas fuel technology course, Chamblee, demonstrates typical testing equipment.



Safe practices in the handling and installation of LP-Gas equipment and appliances are studied, as well as problems in the manufacturing of equipment.

Private Contributions Build Scholarship Fund

By CAROLE D. LINDGREN

The Bastian-Blessings Co., Chicago, manufacturers of LP-Gas equipment, has announced that contributions so far received from its "dollar-per-man" plan will pay for 32 scholarships to the two-year Gas Fuel Technology course at the Southern Technical Institute, an extension of Georgia Tech at Chamblee, Ga.

These scholarships are valued at \$550 for Georgia residents and \$990 for non-residents of the state. In addition to paying the tuition of the winning students, the LP-Gas industry is providing equipment and facilities for use in the course. The Bastian-Blessing Co. is contributing whatever amount is necessary to

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bring any unfinished fund up to a complete two-year course.

Georgia Tech's is the first complete course in gas fuel technology to be offered in any university, although other schools have given short lecture courses. Southern Technical Institute presents specific work on the many uses of gas as a fuel and the required equipment to utilize gas. Shop work includes instruction in all kinds of problems of equipment manufacture, and in the installation and servicing of equipment.

"This course was designed especially for the gas industry to train young men to meet a growing shortage of technicians," said Col. Ellsworth L. Mills, vice president of The Bastian-Blessing Co. "Successful completion of this course virtually guarantees a secure job and a bright future. It offers exceptional opportunities to both employers and prospective employees, and contributes to the future growth and welfare of the entire LP-Gas industry."

The Chamblee school has been sponsored from the first with enthusiasm by Colonel Mills. Recently he announced an ingenious plan of his own to create scholarships at the Institute. In the last issue of this house publication entitled "Who and What" he invited industry members far and wide to send in individual donations of \$1 for such scholarships and the results have been surprisingly gratifying.

Anyone who would still like to support this educational effort for future LP-Gas engineers may send contributions to Colonel Mills in care of The Bastian-Blessing Co., Chicago.—Editor.

How Many Dealers Know Their Cost of Doing Business?

Dealers who do not have good cost accounting systems often find it difficult to determine the cause of operations losses.

In a recently published bulletin by

the Minnesota Petroleum Gas Assn., Secretary John Locke offers some vital and interesting figures to help dealers plan and keep track of their expenditures. The following cost table is based upon gross sales of 1 million gallons per year of LP-Gas, taken from operations in the St. Paul-Minneapolis area:

	Per Gallon
Gas, laid-in	\$.0570
Shrinkage .....	.0023
Driver's wages & tank maintenance .....	.0103
Truck expense .....	.0032
Plant labor & repair.....	.0040
Advertising .....	.0054
Depreciation .....	.0089
Sales expense .....	.0059
Office wages	\$.0045
Telephone, printing, postage .....	.0038
Taxes .....	.0024
Insurance .....	.0036
Miscellaneous general expense ....	.0010
Management .....	.0050
Bad debts .....	.0011
Total.....	\$.1184

Phillips Petroleum Takes Over Synthetic Rubber Plant

Phillips Chemical Co. has been notified by Reconstruction Finance Corp., Office of Rubber Reserve, that it will take over operation of the government-owned Copolymer synthetic rubber plant near Borger, Tex. Phillips Chemical Co. is the wholly owned chemical subsidiary of Phillips Petroleum Co.

The transfer to Phillips marks the first integrated manufacture of synthetic rubber through all stages from the production of raw materials to the finished product. Phillips Chemical Co. already operates the adjoining Plains butadiene plant, which Phillips designed and built for the government during World War II. This plant now produces more than 50,000 tons of butadiene yearly.

ASSOCIATIONS

North Eastern-South Eastern LPGA Districts Meet Oct. 5-6

With the North Eastern-South Eastern meeting of the Liquefied Petroleum Gas Assn. and four other major industry events drawing LP-Gas men and women to Atlantic City, N.J., the first week in October, this combined district session is expected to roll up an attendance approaching 300, according to F. R. Frost, sales manager, Pyrofax gas division, Union Carbide & Carbon Corp., New York City, who is in charge of arrangements. The program will feature talks appropriate to the national emergency and its potential impact on the LP-Gas business.

The speaking portion of the LPGA meeting is scheduled for Oct. 5, at the Ambassador hotel. Friday will be left open to permit attendance at the annual Gas Appliance Manufacturers Assn. exhibition of gas appliances and equipment. Other events that will help make Atlantic City the gas mecca of the nation are the annual convention of the American Gas Assn., Oct. 2-6, a meeting of the National Committee for LP-Gas Promotion, Oct. 3, and an LPGA board meeting, Oct. 4-5.

Heading the list of speakers on the Thursday program is Lt. Gen. Robert L. Eichelberger, commander of the U.S. 8th Army during World War II, who will discuss "The Far Eastern Situation." "Our Industry and the National Emergency" will be the pertinent subject of Paul K. Thompson, Esso Standard Oil Co.

Other speakers and their topics include H. Emerson Thomas, "Current

Trends in Weights and Measures Legislation and What It Means to You"; C. J. McAllister, "Knowledge is Power—and Profit"; M. L. Trotter, "What the National LP-Gas Promotional Program Means to You"; G. M. Rohde, Jr., "Your Most Profitable Responsibility"; W. D. Cook, "How to Reduce Your Distribution Costs," and Howard D. White, LPGA's executive vice president, "Your Association and Its Progress."

Registration will start at 9 a.m. Thursday in the "22 Club Rotunda." AGA invitations, to be issued at that time, can be exchanged at AGA convention headquarters for badges which will admit LPGA registrants to GAMA's exhibit in the Atlantic City auditorium and its annual variety show.

Walter A. Naumer, Pyrofax vice president, and director of LPGA's North Eastern District, and W. S. Lander, president, Rulane Gas Co., Charlotte, N. C., and director, South Eastern District, will preside at the meeting.

New England

Louis S. Davis has been appointed executive secretary of the LP-Gas Assn. of New England, according to a recent announcement from Plumer E. Pope, president of the group. Mr. Davis has established offices in Room 620, 419 Boylston St., Boston.

Long experience in sales, sales promotion, management, and trade association work qualify Mr. Davis to guide the activities of LP-Gas dealer-members in New England. Plans are now under way for a 1951 meet-

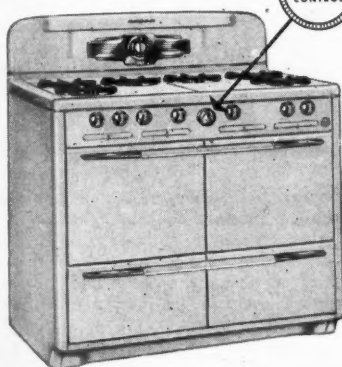


No less than 582 families are scheduled to lodge in dramatic, new Manhattan House—built, owned and operated by New York Life Insurance Company—before the end of 1950. Outstanding among the appliances they'll find for promoting better living, will be 582 ultra-modern Roper Gas Ranges—enabling every homemaker to enjoy fast, clean, thrifty, perfect cooking.

And playing its part on every Roper unit—maintaining oven cooking temperatures exactly as desired—will be Wilcolator Oven Heat Control.

For WILCOLATOR has been specified by:

Roper Gas Range—Model 50-7306



Roper because it means precision cooking at a touch of the finger tips... assures time-saving and economy too, since the exclusive Wilcolator "Uniflow" valve permits exceptionally fast pre-heat, maintains cooking temperatures so precisely that gas consumption is minimized. In addition, Wilcolator is so easy to service that costly service calls are eliminated.

When selecting the ranges you handle, profit by giving thought to these things... and to the example of Manhattan House. For you, too, will find that utmost satisfaction in cooking equipment is best assured by a Wilcolator-equipped range line.

SOME WELL KNOWN GAS RANGES USING WILCOLATOR FOR PRECISION CONTROL

Autocrat	Garland	Real Host
Coleman	Grand	Roper
Copper-Clad	Hardwick	Royal Rose
Crown	Hart	Tappan
Detroit Jewel	Kalamazoo	Universal
Enterprise	Maytag	Welbilt
Estate	McClary	Western Holly
Florence	Norge	Wincraft
	Prizer	



ing and trade show in Boston, with March as the tentative date.

In mid-June, membership in the newly formed association stood at 168, with the number increasing weekly.

Kennebec Valley LP-Gas Assn.

Leon C. Roberts, president of the Kennebec Valley LP-Gas Assn., presided at the regular quarterly meeting of the group held Aug. 21 at the Augusta House in Augusta, Maine.

In addition to regular members, several guests from LP-Gas distributing companies were in attendance. According to L. H. Holman, many interesting discussions of industry problems were heard.

Ohio

Nov. 8-9 are the dates of the Ohio LP-Gas Assn. fall meeting. Interesting subjects and a new type program are planned, according to George Gray, president of the group.

Meeting place: Columbus.

Virginia

Business and pleasure will both prevail at the Oct. 12-13 annual convention of the Virginia LP-Gas Assn. at the Cavalier hotel, Virginia Beach, Va. Business will include talks by A. B. Ritzenthaler, Tappan Stove Co., on "Gas Range Selling"; M. L. Trotter on "What the LP-Gas Association Is Doing for Promotion"; A. E. Jake-man, Norfolk Shipbuilding & Drydock Assn., "Industry's Responsibility for Personnel Relations"; "Past and Future Legislation" by Arthur Kreutzer, LPGA; Captain W. R. Creekmore, chief inspector of the Bureau of Fire Prevention, Norfolk fire department, "How Fire Prevention Officials Look Upon Our Business"; "Developing

Commercial and Water Heating Load" by J. Z. Watkins, Rulane Gas Service; and W. E. Johnson, clerk of the Federal court, "Dynamic Rather than Static."

Pleasure offered by the hotel consists of golf, swimming, tennis, dancing, and many other recreational facilities. A friendship hour, through the courtesy of manufacturers' representatives, a banquet, and dance will be held Oct. 12.

Presiding over the business meetings will be Sam W. Goode, president of the association. A ladies' reception committee is composed of Mesdames Ray Cassett (chairman), Sam Goode and Tom Sykes, wives of officers and directors of the group.

Subjects Announced for CNGA Fall Meeting

M. L. Arnold, general chairman, announced that an additive has been introduced to the hydrocarbon composition of this year's forthcoming Fall Meeting of the California Natural Gasoline Assn. to be held Nov. 9-10, which should prove to be most interesting and educational to those who plan to be in attendance.



M. L. ARNOLD

On Thursday, Nov. 9, a series of five forums will convene, each of which is of particular interest to some phase of the natural gasoline industry. J. B. Taylor, Signal Oil & Gas Co., will conduct a discussion on "The Efficient Operation and Maintenance of Plant Equipment." C. D. Gard, Union Oil Co., will head the forum on "The Ap-

THE

**INITIAL
PRICE**

IS MERELY THE

DOWN PAYMENT ON

PUMP COST

THE INSTALLMENTS in the form of operating, maintenance and labor costs dwarf the price of the pump after a rather short service period.

Check your own records. You will find, as others have, that labor represents nine-tenths of your total pumping cost. Even a modest saving on this single item pays for a Smith Pump in no time.

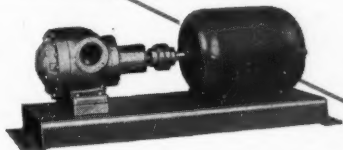
Labor savings are a carefully planned part of Smith Pumps.

The exclusive Smith self-adjusting packing requires no tightening of packing screws, no lubricating, no servicing of any kind.

A high maintained delivery rate assures fast transfer and man-hour savings during the long service life of Smith Pumps.

Uninterrupted operation made possible by the Smith Exchange Service reduces shut down losses.

Smith Pumps don't leak; not counting the fire hazard, the product lost through leaky packing alone may be worth the price of the pump.



Fourteen models of Smith Pumps are available for all types of truck and bulk plant service. Write for literature and prices.

SMITH

PRECISION PRODUCTS COMPANY

1135 Mission Street, South Pasadena, Calif. — Phone: PYramid 1-2293

NBPA Report Next Month

Because this issue of BUTANE-PROPANE News went to press before the annual and district convention of the National Butane-Propane Assn. was held in Cleveland Sept. 18-19, this meeting will be reported in our November issue.

plication of Chemical and Process Engineering Principles to the Efficient Design and Operation of Natural Gas Processing Plants." W. W. Robinson, Jr., The Texas Co., has organized a group discussion on "The Role of the Chemist and Laboratory in Efficient Natural Gas Operation." M. W. Kibre, General Petroleum Corp., will lead the forum, "The Efficient Mechanical Design of Natural Gas Processing and Compression Plants and Natural Gas Gathering and Distribution Systems." A luncheon, to be chairmanned by Past President Wm. A. Kirk, California Southern Oil Co., will be held for the discussion of "The Efficient Management of Natural Gas and Natural Gasoline Operations."

Prepared discussions by experts of wide knowledge and years of experience in the industry will be presented for the information of those men attending each forum.

Wm. Schaller, California Dealer, Passes Away Suddenly

"Bill" Schaller, widely known California operator and owner of Placer Gas Co., Auburn, Calif., died suddenly the first week in September.

Mr. Schaller was well known in California gas circles and helped to organize the present California Liquid Gas Dealers Assn. At the time of his death he was chairman of the safety code committee of that group.

Canadian Western Division, LPGA, Appoints Committees

The Canadian Western Division of the Liquefied Petroleum Gas Assn. met in Calgary, Alberta, July 17, for its first organizational meeting. All representatives taking part in the organization were from the province of Alberta, but sufficient interest in forming the western Canada section had been shown by dealers in other western provinces, and it is expected that the section will grow rapidly.

C. Aplund is chairman of the new section and S. W. Pepper is secretary.

Important Committees Appointed

First business of the meeting was to determine which committees should be set up within the section, and to elect officers for these committees. These were: technical and standards committee, Bill Judd (chairman), Geoff Pritchard (vice chairman); educational committee, A. Luna (chairman), Ray Johanson (vice chairman); safety and legislative committee, M. J. Pryde (chairman), T. Thompson (vice chairman); convention and finance committee, L. Oughton (chairman), Warren Henderson (vice chairman); membership committee, H. Alty (chairman), J. MacArthur (vice chairman); sales promotion committee, Norm Brown (chairman), W. J. Sanford (vice chairman).

The membership resolved that NBFU pamphlet 58, Canadian revision, covers necessary regulations for the industry, and directed the technical and standards committee should do everything possible to get approval of the regulations therein by the dominion and provincial governments and by the Canadian Fire Underwriters Assn.

Gas Torches Replace Early Branding Irons

NOW cattlemen can have their XXX or their —7 clean-cut in a minimum of time with an LP-Gas branding torch.

The design and construction of the new branding torch is the result of several years of development and testing by the Ransome Co., Emeryville, Calif., in conjunction with practical cattlemen.

Formerly Ransome provided suitable burners and fireboxes for heating the conventional type of branding iron. This simple equipment was a decided improvement over the old wood fire, a remnant of the early days of the West, but now the conventional branding irons are out along with the Conestoga wagon.

The head of the new Ransome branding torch is of cast bronze, a metal hard enough to stand severe treatment, an excellent conductor of heat, and not inclined to oxidize, scale, and peel off, as does the conventional branding head made of steel. Since the bronze metal resists wear over a long period of time, it has been found that stockmen now prefer 3/16 in. wide branding characters instead of the 1/4-in. width formerly used, apparently to compensate for a rapid reduction of this width due to the scaling or peeling off action.

Since each stockman's brand insignia is singularly his own and rarely duplicated, it is necessary first to make a wooden pattern of each brand insignia and then cast it in bronze at the foundry.

The torch is so designed that a

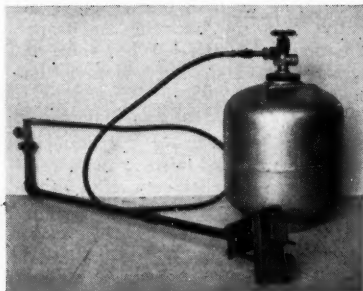
flame from a small burner plays directly upon the back of the bronze branding head. Three types were designed to accommodate various branding methods.

1. Chute Type. The assembly consists of a torch using the standard branding head and burner, and a relatively large cylinder connected to the torch by a length of flexible tubing. This arrangement satisfies the requirements for branding in a chute.

2. Holster Type. A small, lightweight cylinder of one pint capacity is slung over the back of the operator. Flexible tubing connects the cylinder to the torch which is identical with that used in the chute type assembly. The ends of the flexible tub-



Carl Golden demonstrates how the Ransome holster type branding iron can be strapped on for field branding.



The "chute-type" branding iron and small gas tank.

ing are equipped with a "quick change" type of fitting permitting the operator to disconnect the torch section from the cylinder quickly and easily without the use of wrench or pliers.

3. Compact Unit Type. The characteristic feature of this unit is that the small one-pint capacity cylinder forms a part of the torch handle.

The torch has many advantages:

The use of LP-Gas eliminates clogging and fouling. The burner requires no priming or pumping. The heat input can be quickly and easily controlled to provide just the proper temperature for a good clean brand. Shock, loss of appetite, loss of weight, infection, and screw worm trouble are at a minimum in cattle branded in this way.

The torch is highly efficient. A pint of propane will operate the branding torch for 4 to 5 continuous hours.

The head of the branding torch can be heated by means of a coal or wood fire. This does not injure the torch for a return to gas operation.

When operating a gas torch in wooded or brushy areas, the possibility of starting fires is reduced to a minimum.

The marketing of the Ransome branding torch will be through the Western Craftsmen, 772 Bryant St., San Francisco.

Sam Kapnek, Pioneer Gasman, Passed Away Aug. 16

Sam Kapnek, 72, one of the pioneers in the development of the LP-Gas business in the East, died Aug. 16 in Jefferson hospital in Philadelphia.

Mr. Kapnek was founder and chairman of the board of the Natural Gas Co., which he established in 1930. His home at the time of his passing was in Elkins Park, Pa.

The Natural Gas Co. is an LP-Gas distributing company in southern New Jersey and eastern Pennsylvania. It has seven bulk plants and 10 offices with head office at Hammononton, N. J.

Among the members of the family now connected with the Natural Gas Co. are a son, Theodore Kapnek, president; Samuel Glickman, a son-in-law, vice president; Marvin B. Glickman, grandson, secretary; William Platt, grandson, treasurer; and Louis Glickman.

Fire Prevention Week Kits Available From NBFU

Fire prevention week for 1950 is scheduled for Oct. 8-14, according to announcement by the National Board of Fire Underwriters, which reports that kits for prevention campaigns during the period are now available.

NBFU lists posters, stamps and stickers, educational booklets, school stories and plays, and material for advertisers, publishers, and editors. Those interested in obtaining information about material should write NBFU, 85 John St., New York City.

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Colorado's Joint LP-Gas Display at State Fair Sets Pattern for Other Associations

By Gene C. Creighton

The story of LP-Gas was effectively presented to many thousands of visitors to the Colorado state fair, held in Pueblo, Aug. 28-Sept. 1, when the Colorado Liquefied Petroleum Gas Assn. presented a huge 160-foot booth.

This booth, 60 feet longer than that used previously by the Colorado association which, incidentally, has pioneered this type of display, drew attention from more than 20,000 visitors, according to association headquarters. All dealers in the association were invited to participate in the booth, which contained complete displays of all types of equipment used by the industry, from underground tank systems to industrial and home appliances. Colorful signs, plenty of "giveaways" and explanation by association representatives, created many thousands of additional LP-Gas prospects.

To insure plenty of attention from the public, two drawing prizes were set up for each day of the display, including a gas range, and one other LP-Gas appliance. During the fair, a 30-minute program was broadcast from the booth each day, with 15 of the 30 minutes heard over radio stations located throughout the entire state. Commercials on the program described the progress of LP-Gas in the state, its importance in bringing home comforts and modern living to thousands of rural area dwellers.

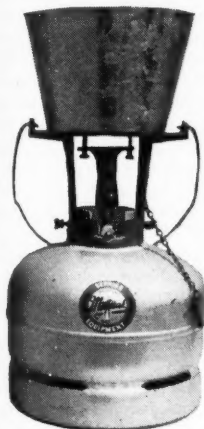
The program was of the audience-participation type, with many small

prizes offered to those selected from the audience in front who expressed their views on LP-Gas installations.

More than 50 Colorado dealers participated in this promotion through the use of window posters and registration cards. Each member was permitted to send along any type of display or photograph desired for showing on the numerous bulletin boards and display tables throughout the 160-foot booth. In addition, the names and addresses of registrants for the prizes at the fair booth have provided a rich fund of new, immediate prospects for all dealers. Dealers were invited to register their own prospects, or will be furnished those from specific sections of the state, according to H. H. Torbit, display chairman.

All personnel for the big booth was provided by dealers and distributors, who volunteered salesmen or executives for one or more days, to assist in telling the LP-Gas story to interested Coloradans. "This is one of the most important projects ever undertaken by any state association," according to Marion Chelf, last year's president of the association. "The fact that many other states have evinced interest in our booth presentation, and have asked for photographs or sketches to set up similar types of their own, indicates that its effectiveness is well appreciated. We are proud of the fact that booth display type of promotion for our industry as a whole originated right here in our own association, and has enjoyed tremendous support from all members."

Don't Underestimate . . . the Importance of your **PLUMBER!**



No. 2 Furnace:

Designed especially for plumbers. Compact, lightweight. Will melt 8" pot of lead in 12 minutes. Develops 2350 Deg. F.



No. 5 Torch:

- Excellent for pre-heating work. Used by plumbers and craftsmen for close melting and heating jobs. Develops 2400 Deg. F.

One LP-Gas Dealer now serves 800 of the 1200 plumbers in his area.

He finds that an average plumbing customer employs six master plumbers, working three trucks. Each truck carries two cylinders (the six to twenty-lb. size); uses five furnaces for melting lead and as many as five melting torches. This is positive proof that LP-Gas Furnaces and Torches are now standard equipment in the plumbing industry. Many other craftsmen depend on Butane and Propane for fast, efficient heat. A few of these include: Tinsmiths, Painters, Auto-body Workers, Telephone Linemen, Pipeline Crews, Jewelers, Etc.

MUTUAL offers a complete line of LP-Gas Torches and Furnaces . . .

designed and engineered by men with more than fifteen years industry experience. Every model has been field-tested and approved by workmen who use them.

Other MUTUAL products include: Sheet Metal Furnaces, Mobile Furnaces; Heavy-Duty, Broad-Flame, Pointed-Flame, and High-Speed Torches; Paint Burners and Scrapers, Soldering Irons, Cylinder Vise, Trailer Floor Furnace, and Portable Heaters.

Write **TODAY** for our complete catalog.



Mutual

LIQUID GAS EQUIPMENT CO., Inc.

3600 WEST IMPERIAL HIGHWAY, INGLEWOOD, CALIF.

Bremerton Housing Authority Converts Two Projects

By **EDWIN E. HAWLEY**

Chief Engineer, Gasair Associates,
San Francisco

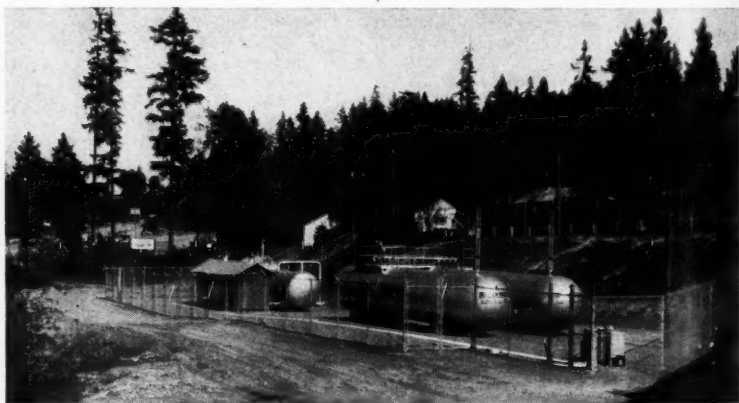
PRIOR to 1948 the Bremerton (Washington) Housing Authority relied on the local gas company to supply the fuel needs of their two projects located in the east and west sections of the city. Today, propane-air gas, richer in Btu's and lower in cost per Mcf. than the manufactured gas previously used, is utilized by these two projects.

The authority's decision to seek a new source for fuel resulted from periodic gas supply failures caused by the clogging of the local gas company's high pressure mains. A preliminary survey indicated that it was financially impractical to replace the original gas mains. Further study as to the possibility of converting from gas to electricity indicated that the cost of such an undertaking would be

prohibitive. Under the direction of O. F. Rankin, project manager, consideration was given to the advisability of using LP-Gas. A cost study showed that such a project would be well within reason.

In 1947 a contract amounting to \$28,000 was let for the construction of a propane-air gas plant at the East Project. The plant consisted of one 17,000-gallon propane storage tank, a 575-cubic foot gas surge tank, two 10,000 cu. ft./hr. "Gasair" vaporizer-mixer units, a Roots-Connorsville gas meter and other miscellaneous equipment. The new plant supplied 1000-Btu gas to the project, requiring the adjustment of orifices in gas ranges and the replacement of orifices on water heaters. It was also deemed advisable to equip all water heaters with 100% shutoff valves of the "Baso" type.

As a result of the economies and elimination of fuel failures which were immediately effected at the East Project, it was decided to erect a similar type plant at the West Park



This is the Westpark plant of gas-air system at Bremerton, Wash.

Project. In September, 1948, the construction contract was awarded to Gasair Associates, of San Francisco, for the sum of \$42,000.

This plant is comprised of two 25,000 cu. ft./hr. Gasair machines, two 17,000-gallon propane storage tanks, one 1500 cubic foot gas surge tank, one Roots - Connersville gas meter etc. The West Park plant is now serving 840 units. Consumption per unit, including water heating for 11 public laundries, amounts to 2745 cubic feet per month.

The current price of propane delivered to storage tanks at Bremerton is 17.5 cents per gallon. The Authority has used 10.7 gallons per thousand cubic feet of 975 Btu gas, costing \$1.87 for liquid propane, \$.075 for plant and distribution labor, and \$.075 for materials and maintenance parts for the plant. The total cost per Mcf has been \$2.02 compared to \$2.14 per Mcf of 500 Btu manufactured gas previously purchased from the local gas company.

The Price Situation

It should be noted that the delivered price of 17.5 cents per gallon for propane is generally considered to be excessive. However, due to existing transportation circumstances, the fuel cost must necessarily be higher than normal, and substantially lower costs may prevail in other areas because of this factor. Recent decreases in the basic price of propane will materially reduce the costs of gas production.

According to K. C. Pounds, Property Control Officer for the Authority, the two Bremerton LP-Gas air installations have proven entirely satisfactory from every standpoint. One of the important factors which has contributed to the success of these installations is the fact that no electric power, water or steam is re-

quired for the operation of the plants.

The Gasair equipment utilizes the inherent pressure of operating power. With electrical outages occurring frequently, the need for costly standby electrical facilities is eliminated.

CALENDAR

1950

Oct. 2-6—American Gas Assn. Annual Convention. Atlantic City, N. J.

Oct. 2-6—Gas Appliance Manufacturers Assn. Exhibition of Gas Appliances and Equipment. Atlantic City, N. J.

Oct. 4-5—LPGA Board of Directors, Ambassador Hotel, Atlantic City, N. J.

Oct. 5-6—LPGA North Eastern and South Eastern Districts Joint Meeting. Ambassador Hotel, Atlantic City, N. J.

Oct. 8-14—Fire Prevention Week.

Oct. 12-13—Virginia LP-Gas Assn. Cavalier Hotel. Virginia Beach.

Oct. 16-20—National Safety Congress. Chicago, Ill.

Oct. 27—Southern Regional Meeting, NGAA. Headquarters: Blackstone Hotel. Tyler, Texas.

Oct. 28—Butane-Propane Institute of Louisiana. Constitutional Amendment Meeting. Alexandria.

Nov. 6—Minnesota Petroleum Gas Assn. Annual Meeting. Minneapolis.

Nov. 6-7—North Dakota LP-Gas Assn. Annual Convention. Clarence Parker Hotel. Minot.

Nov. 9-11—California Natural Gasoline Assn. Ambassador Hotel, Los Angeles.

1951

Jan. 15—Arkansas Butane Dealers Assn. Mid-Year meeting. Little Rock.

Feb.—Indiana LP-Gas Assn. Annual Meeting and Trade Show.

Mar. 26-28—LP-Gas Service School. University of Minnesota. Farm School. St. Paul.

April 25-27—NGAA. Mayo Hotel. Tulsa, Okla.

May 7-10—LPGA Annual Convention & Trade Show. Stevens Hotel. Chicago.

Weighing Ways to Measure LP-Gas

This paper, presented by Mr. Brenton and Mr. Perkins, both of the Bureau of Weights and Measures, State of California, was originally read at the 35th national conference of weights and measures, Washington, D. C., May 24. The paper, in its complete form, covers its subject in detail and will be repeated in Bakersfield, Calif., in October. Only limited extracts are quoted here to explain the differences in two prevailing methods of measurement.—Editor.

UNTIL a few years ago, inspections concerning the accuracy of LP-Gas dispensing devices were sketchy and inaccurate in California. A few of the counties made laudable attempts to inspect these devices, but a majority of county weights and measures officials left inspection services up to dealers and distributors.

It is an accepted fact that all mechanical devices wear out sooner or later, and because LP-Gas is a dry fuel with practically no lubricating powers, it is not surprising that the wear on the meters used for the measurement of this commodity is much greater than would be the case if the same meters were being used in the measurement of diesel fuel or motor oil.

If proper installation of LP-Gas measuring equipment is not followed, a meter may pass vapor and register it as liquid, cheating the buyer in about 65-1 ratio at 60 lbs. pressure,

or the meter may bypass a considerable quantity of liquid, thus causing a loss to the seller.

In California, two methods for checking accuracy of equipment for butane and propane are in use. The county of Los Angeles uses the gravimetric method (weight) and the state of California and three counties (Tulare, Kern, and Fresno) use the volumetric (liquid volume) method.

In the State Bureau of Weights & Measures, we prefer the volumetric method because it parallels the delivery of gas in an actual sale to a customer.

This method of inspection discloses the errors of measurement due to rate of flow, leaky diaphragms, delivery of liquid through vapor connections, faulty installations, dirty screens, and sticking meters. It is simple, fast, and does not require the extensive mathematical calculations that are necessary with the gravimetric method.

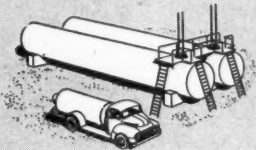
In addition, the equipment used in the volumetric method is more fool-proof and rugged, we believe, than that required for the gravimetric inspection method.

For example, in using the gravimetric method, a vapor return line is not used, although in actual commercial practice a vapor return line is often used; if the dispensing equipment is not in excellent condition, it is oftentimes impossible to fill the test vessel—meaning that the dispensing equipment gradually slows down and finally stops (during which slowdown excessive slippage occurs

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With this convenient new service, you can carry out your plans for heavy equipment expansion TODAY rather than in the distant, unpredictable future. This is the logical, practical time to formulate your plans and . . . with the aid of our truly complete financing service . . . to follow them through. Our added service provides a real opportunity for you to expand NOW and enjoy the bigger sales volume that results.

Hundreds of progressive dealers are already making the most of installment selling by using our financing service that covers retail installment financing of sales to gas consumers and the financing of a floor plan for inventories of appliances and containers purchased by the dealer for resale to customers.

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Cleveland 8, Ohio

Gentlemen: Please send me complete details concerning the financing of:

- ☐ Capital assets (tank trucks, etc.)
- ☐ Retail sales to gas consumers
- ☐ Floor plan of appliances and containers for resale to customers

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COMPANY.....
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CITY.....STATE.....

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obtain complete information**



that would not be existent in normal delivery). This is especially true if the weather is warm and the product being tested is propane.

We also prefer the volumetric method because we do not have to determine the specific gravity of each sample being measured; in fact, we needn't consider the specific gravity of the product at all.

We may also test installations regardless of whether a vapor return line is used; with the gravimetric method, a vapor return line is never used during weights and measures inspections. If an installation that does not have a vapor return line is being inspected by the volumetric method, it is only necessary to record the vapor pressure at the beginning and at the end of the filling, and to compute the vapor that has been compressed back into a liquid by displacement, and to allow for additional vapor compressed into the vapor space at the higher finishing pressure.

Warren Pioneers With LP-Gas Barge

THE FIRST barge designed solely for the transportation of liquefied petroleum gas on the Intercoastal Canal of the Gulf Coast and on inland waterways is being constructed for Warren Petroleum Corp. of Tulsa, Okla., at the shipyards of the Bethlehem Steel Co., Beaumont, Texas.

At the same time a channel is being dredged and barge docking facilities are being constructed at the Warren corporation's large LP-Gas storage terminal on Blakeley Island at Mobile, Ala. Barge docking facilities already are available at the

corporation's LP-Gas terminal at Norsworthy (Houston).

The barge is expected to be completed and in service early in November, in time to augment materially the transportation of LP-Gas during the coming winter's peak demand periods to the rapidly expanding markets in the south and southeast being supplied by Warren. The cargo capacity of the barge will be equivalent to approximately 35 tank car loads of LP-Gas.

New Tank Design Employed

The barge will be equipped with six cargo carrying tanks of an entirely new design for handling LP-Gas. Instead of being round or cylindrical, each tank is being fabricated in a multicylinder design which will increase materially the volume which could be carried in the same space if the conventional cylindrical type tanks were used. The tanks are being fabricated by the Chicago Bridge & Iron Co., at its Birmingham, Ala., plant. The six barge tanks will have a combined water capacity of 360,000 gallons.

The barge will be 195 feet in length, with a width of 44 feet, and a depth of 10 feet and 6 inches. Each of the multicylinder tanks will be 71 feet, 6 inches in length and approximately 12 feet in overall width.

Three of the tanks will be placed forward in the steel barge hull and three aft of an elevated walkway across the center of the barge. All controls will be accessible from the walkway and all fittings and pipe connections will be made into the tops of the tanks. Loading and unloading lines also will be above the level of the tanks.

The barge will have a draft of 6 feet 2 inches when loaded with butane and a draft of 5 feet 9 inches when carrying propane.

Recovery Methods Give Dealers New Viewpoint

A LARGE group of independent LP-Gas dealers from southern California and Mexico recently had the opportunity to take part in an inspection trip through the oil fields and gasoline plant of the Signal Oil and Gas Co. near Huntington Beach and to witness the production of this fuel—from the well to finished product.

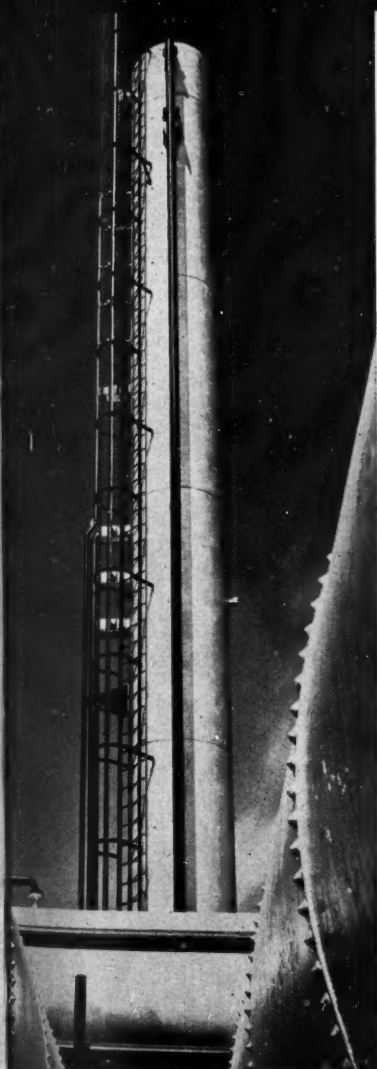
Highlight of the tour was reached when the party was divided up into small groups and conducted through Signal Oil and Gas Co.'s Plant No. 11 which processes the wet gas produced from the leases that they had previously visited.

This plant with a rated capacity of 150,000 gallons of natural gasoline per day is one of the most modern and up-to-date plants in the area. Sales of LP-Gas from this plant are currently over 7,000,000 gallons per year.

Members of the group expressed amazement as they were made aware for the first time of the tremendous costs of building and operating equipment necessary to the manufacture of butane and propane.

The visiting group was hosted by Signal Oil and Gas Co. representatives headed by R. W. Heath, vice president in charge of Signal's gas department; J. B. Taylor, Jr.; J. Gordon Allard, and other Signal representatives.

Following the plant tour, the group was entertained at Corona del Mar for dinner and an informal get-together session to discuss their mutual problems.



Fractionating column in Signal Oil & Gas Plant 11, Huntington Beach, Calif., from which butane and propane are taken off. LP-Gas storage tank shown at base of column and gasoline tanks (riveted) at sides.

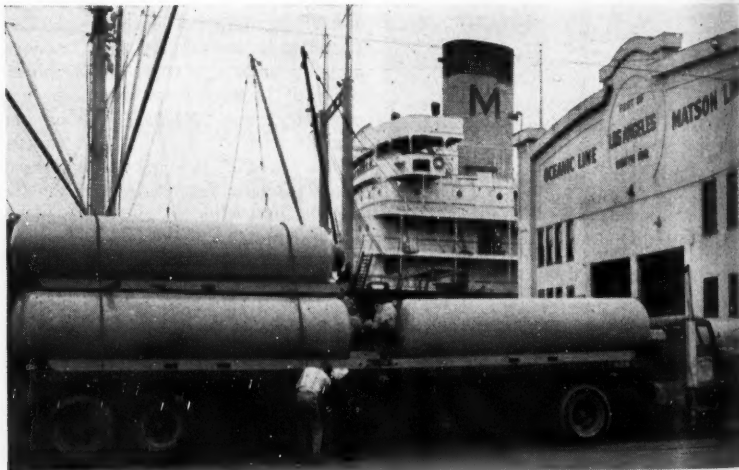
New Company Will Manufacture, Distribute LP-Gas in Hawaii

Pacific Refiners Ltd., a new company with headquarters in Honolulu, T. H., and an affiliate of Honolulu Gas Co., has announced plans for construction of a new plant which will make and distribute butane and other products in the island capital. The plant, which will refine crude oil brought to Honolulu in tankers, will end the former practice of shipping in LP-Gas for distribution throughout the territory.

Heavy California crude oil will comprise the charging stock for Pacific Refiners' plant, which will produce road oil and gas oil and other by-

products in addition to butane. Pacific Refiners will also step into the field of marketing gas appliances—thus its operation will encompass production of the LP-Gas and the sales of the appliances which will use it. Heretofore, electricity has been the popular fuel beyond the mains—in outlying Hawaiian communities—since LP-Gas, shipped in, in cylinders, has been priced above the competitive level.

The new plant will revolutionize a long-standing Hawaiian practice, in that all of the items it is scheduled to produce have in the past been shipped from the U. S. West Coast as pack-



These 1143-gross gal. butane skid tanks are being loaded aboard ship at Wilmington, Calif., for delivery at Honolulu, T. H. Constructed to exact specifications by the American Pipe & Steel Corp., Alhambra, Calif., they will be used for storage and transportation by Pacific Refiners, Ltd.

LEADERSHIP IN SALES!



Your Best Proof of GARLAND QUALITY



MODEL NO. 83 GARLAND RESTAURANT RANGE—Six open top burners, griddle, broiler and two ovens. Choice of top sections to give exact arrangement of open grate, hot top and griddle sections you need. Also three other basic restaurant range models; each with choice of top sections.

MODEL NO. 38 GARLAND DINETTE—Sensational value! Features include: large broiler, ample storage space, full size oven, four open top burners, large griddle, convenient drip pans. With or without high shelf. Standard finish is **BLACK PORCELAIN**. Also available in stainless steel.



When one line of commercial cooking equipment far outsells all others, year after year, *there are good reasons!* Always one reason is *quality!*

It is Garland quality which enables Garland to *out-perform* and *out-economize* the field. And Garland production, by far the largest in the industry, gives indisputable proof that Garland *out-values* the field!

It pays to push Garland! Sales leadership means greater profits for you!

All Garland units are available in stainless steel and equipped for use with manufactured, natural or L-P gases.

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COMMERCIAL COOKING

Heavy Duty Ranges • Restaurant Ranges • Dinette Ranges • Broilers • Deep Fat Fryers
Toasters • Roasting Ovens • Griddles • Counter Griddles

DETROIT-MICHIGAN STOVE CO.

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aged items—under which system their cost was much greater.

Fish Engineering Corp. of Houston, Texas, is to build the new plant, which will handle a daily charge of 3000 bbls. of crude. Annual production of butane is scheduled to be between 70,000 to 100,000 bbls.

With an advance shipment of 25,000 gals. of butane from California in large storage tanks, distribution of LP-Gas on an increased scale has begun in the Hawaiian Islands prior to the completion of refinery facilities, according to an announcement made by A. E. Englebright, vice president and general manager of Pacific Refiners, Ltd.

The tanks, which will arrive in several shipments from Wilmington, Calif., are of two sizes and will hold 573 and 1143 gross gallons. Used now for transporting bulk fuel from the mainland, the tanks will later be used for distribution of the fuel to users in rural areas.

Designed and constructed specifically for Pacific Refiners by American Pipe & Steel Corp., Alhambra, Calif., each tank is built to ICC specifications and was engineered to facilitate handling and to take up minimum space in transport.

Jack Lane, president, and John Carl, head of the LP-Gas tank sales for American Pipe & Steel, made the trip to Honolulu to assist in the inauguration of the new fuel service and in the installation of fuel handling equipment.

Harold La Frentz, formerly of Cedar City, Utah, has been appointed distributor for the organization.

SMOKELESS BROILING

The clean, intense, controlled gas flame consumes the smoke. Nothing broils better than gas. The natural juices and flavor are sealed in.

Phillips Petroleum Founder, Frank Phillips, Died Aug. 23

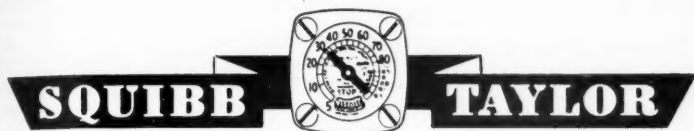
Frank Phillips, philanthropist, civic leader, oil industry pioneer, and founder of Phillips Petroleum Co. (Bartlesville, Okla.), died on Aug. 23. He was 77.

Originally a banker—he organized the Citizens Bank & Trust Co. in Bartlesville—Mr. Phillips found his operations more and more concerned with the oil industry, until in 1917 he and his brother, L. E. Phillips, incorporated Phillips Petroleum Co. From the original company organization, with 27 employees and assets totaling \$3,000,000, the company has grown to its present stature of one of the largest independent oil companies in the world. Today it employs 17,000 persons and its assets are listed at \$625,000,000.

Was President 17 Years

Frank Phillips served as president of the company for 17 years, as chairman of the board of directors until last year. In 1938, at Mr. Phillips' request, his resignation as president was accepted and K. S. Adams, present head of the company, was elected president.

Mr. Phillips was deeply interested in youth activities, and was a frequent contributor to Boy Scouts of America, from which group he received the Silver Buffalo—scouting's highest award. Other honors he received included admittance to the Oklahoma Hall of Fame, receipt of the French Chevalier of the Legion of Honor decoration, and the award of a distinguished service citation from the University of Oklahoma. He was the only white man ever declared a chief of the Osage tribe—which honor came after years of amicable relationships during Phillips' operations on Osage land.



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To give you faster and more efficient service, we are establishing complete warehouse facilities in Memphis where we will stock a full line of Fisher Regulators; Selwyn-Landers Valves, Fittings and Adapters; and Taylor Visible Gauges (for certain standard installations). Our usual prompt delivery on other sizes direct from the factory. We will also stock many other dealer required items such as Copper Tubing, Flare Fittings, Tite-Seal, Globe Valves and Meters.



We appreciate your business and with these added facilities we hope to serve you even better. Orders received at Dallas or Memphis will be shipped from the most applicable point.

New NBFU Bulletin Covers Relief Valve and Tank Design

The National Board of Fire Underwriters has issued "Special Interest Bulletin No. 287" on liquefied petroleum gas which covers "interpretations of affected sections of pamphlets 58 and 59, resulting from promulgation of 1950 edition of the ASME Code for Unfired Pressure Vessels."

It reads as follows:

"Pending the adoption of a new edition of the NFPA-NBFU standards on liquefied petroleum gas equipment which will make reference to the 1950 edition of the ASME Unfired Pressure Vessel Code, the National Board of Fire Underwriters recommends that the following tables based on the 1950 ASME Code be accepted as meeting the intent of the standards in Pamphlet 58, Section B.9 (b), 2.3(a), 3.1(a) and 4.2(a), and Pamphlet 59, Sections 4(a) and 11 (b).

"Container safety relief valve shall be set to start to discharge as follows, with relation to the design working pressure of the container:

Container Construction	Minimum	Maximum
A.S.M.E. U-68, U-69	100	125
A.S.M.E. U-200, U-201	90	100
A.S.M.E. 1950 Edition	90	100
A.P.I.-A.S.M.E.	90	100

"Storage containers shall be designed and classified as follows:

Container Type	For Gas with Vapor Press. Not to Exceed Lb. per Sq. In. Gauge at 100°F.	Minimum Design Working Pressure psig	A.S.M.E. A.S.M.E. U-68, U-200, U-201 A.S.M.E. 1950 Edition API-A.S.M.E.
100	100	100	125
125	125	125	150
150	150	150	187
175	175	175	219
200	215	200	250

"The foregoing interpretations will not lower the standards of safety as currently required."

Cash Prizes Offered In Safety Contest

A packaged plan showing how to promote interest in safety through contests, with cash prizes paid by the National Safety Council, is offered in the Council's 1951 calendar contest kit.

The kit contains a complete instruction booklet, showing how to conduct safety contests in plants, monthly contest posters, streamers and contest bulletins for bulletin boards, reproduction proofs and mats of limerick contest cartoons, sample entry blank forms for contests, "spot" announcements for public address

systems or house organs, and copy for letters and announcements.

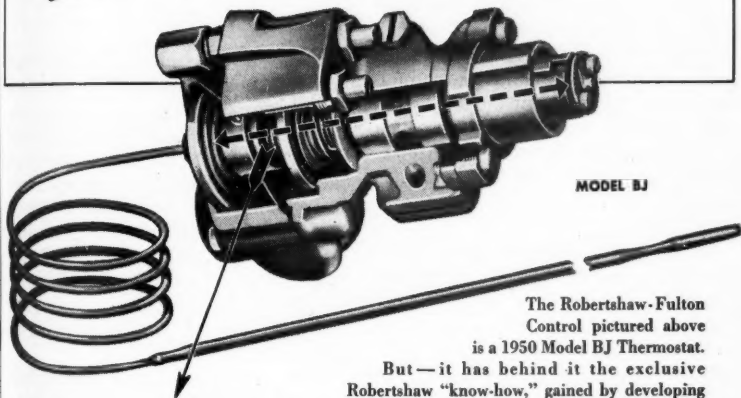
Each monthly sheet of the calendar has a human interest color painting and a limerick to be completed by contestants. The simple rules of the contest are printed on the back of the sheets. Practical suggestions for safety are printed on the back of the sheets.

The National Safety Council offers cash prizes each month of \$100, \$50 and \$25 and 30 prizes of \$5 for the best last line of the current limerick.

For information, write to the National Safety Council at 425 N. Michigan Ave., Chicago.

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requirements call for a sensitive, accurate instru-
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Out of the Robertshaw experience, un-
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thermostat is built on a straight line
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changes, makes possible extreme pre-
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the amount of space required by the
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Lynwood, California • Fulton Sylphon Division, Knoxville, Tennessee • American Thermometer
Division, St. Louis, Missouri • Bridgeport Thermostat Division, Bridgeport, Connecticut

POWER

Should Gas Dealers "Sell Power"?

By CARL ABELL

"SHOULD LP-Gas dealers go into the LP-Gas carburetor business as they went into domestic appliance sales? If so, what is involved in equipment, personnel, and expense?" Because many LP-Gas dealers are looking to the power fuel load to build additional volume and level off the seasonal sales curve, the general answer is "yes."

In some respects the problem is directly parallel to the familiar situation of selling appliances. Dealers generally sell appliances to increase gas sales as well as to realize the appliance profits. The most convenient and best way was to have a stock of gas appliances in stock, where the prospect could look them over without having his or her attention diverted to something which would not use gas. Installation was not much of a problem.

Now we come to carburetion, which may offer an even larger market than domestic uses for LP-Gas. Competition is not on the same basis as in the appliance field. The gasoline companies are not selling carburetors or engines in order to create the demand for gasoline. The gasoline carburetor

firms are not supplying gasoline contracts to get people to buy their carburetors. There is no direct connection anywhere between the sale of gasoline and the sale of gasoline carburetors. That is what is known as a vulnerable situation. It keeps the job of selling LP-Gas carburetion from becoming quite so hard. There was a much tougher competitive situation in domestic appliances, and as an industry dealers did all right.

The big gasoline carburetor manufacturers not only dominate the "original equipment" business—they also blanket the country with organizations which distribute replacement carburetors, service parts, and service training.

LP-Gas carburetion has not yet grown to that very desirable state. It is still an industrial infant. There are those who will benefit, and those who will suffer, from its growth to mature stature. LP-Gas dealers will obviously be the chief beneficiaries. They have more reason to sell it than anyone else. Those who supply and install LP-Gas carburetors and other neces-

sary conversion equipment will make an attractive profit — the complete conversion job brings from six to 10 times the price of a replacement carburetor or overhaul job for a gasoline carburetor. That is nice business for anyone who can get it.

The gasoline carburetor manufacturers will do everything in their power to protect their interests wherever they can make their work effective. They will try to keep their carburetors on, and LP-Gas carburetors off, as original equipment for engines. They will utilize their distributing organizations and service training facilities for spreading propaganda.

Dealers Can Hold the Field

This is the only serious opposition one need expect at present. Normal human inertia will keep the "in between" segments of the industry from doing anything effective for a long time. They do not have a great deal at stake. If LP-Gas dealers will just get in and pitch, they can have this business over the hump before the going begins to get tough.

Which brings us back to the original question, "should you go into the LP-Gas carburetion business as you did into the domestic appliance business?"

There isn't any doubt that dealers should make the best possible arrangements to sell LP-Gas carburetion. Whether they should carry the stock and make the installations is another question. The installation is not as simple as is the case of domestic appliances. For

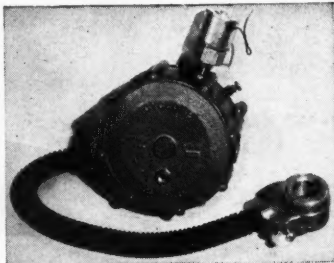


CARL ABELL

the present, most LP-Gas carburetor installations will go on engines which have been in use for some time. Their condition will range all the way from perfect to very bad.

It should be remembered that LP-Gas does not have the miraculous power to heal and revitalize a worn-out engine; no engine should be converted unless and until it is in condition to give a long period of satisfactory operation. If anything goes wrong with a converted engine, the owner's first suspicion will always be that the fuel is at fault. He should experience satisfactory operation long enough to know that the fuel is all right. Valves or rings should not be in bad condition at the outset, nor bearings ready to fall out.

Many engines are basically in good condition, except that the ignition system is giving trouble, or is on the verge of failing. A good electrical tune-up is needed to insure satisfactory operation for the next season. It should be done at the time of the conversion. A good many engines have low



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compression ratios, and these need to be raised to give better performance and reduced fuel consumption.

From the above considerations can be established the basic qualifications of the man who should make your carburetor installations. He should know engines thoroughly so he can accurately diagnose their condition, and perform any reconditioning operations which may be necessary. He should be fully conversant with ignition testing and servicing. He needs to know what is involved in fitting compression ratios to fuels.

How to Use Mechanic

Since personnel is the key to successful LP-Gas conversions, it is essential to have an operation large enough to keep such a mechanic going on a full time basis, or, in a smaller business, such a mechanic may be doing other work, and part of his time could be made available for conversions.

The alternative is to team up with some local shop which is equipped and staffed to do the work. An independent garage which already has a large clientele of truck and tractor operators is generally the best bet, because it is in position to get new gas customers for the dealer in return for the new service customers which are brought to them. The shop should have the agencies for the carburetors, tanks, etc., which will provide them with enough profit to make the job really interesting. That also, will make it unnecessary

to carry a stock of carburetors, tanks, and parts.

The above arrangement is recommended for most LP-Gas dealers. The closeness of the affiliation, of course, depends on the circumstances of each case, from a mere working understanding to financial ownership. Some service shops working on this basis take care of the installations for a number of gas dealers in the surrounding area.

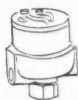
If a dealer decides to enter the LP-Gas carburetion business, there are two general plans which should be considered. There is the one requiring the smallest investment and equipment, and the second is a fully equipped garage. The success of either depends upon having the right personnel.

Can Farm Out Heavy Jobs

The first plan contemplates having a good mechanic on the premises who diagnoses the engines, makes installations, and performs the final tune-ups. The heavy work goes out to other shops having proper facilities and personnel. With this plan, the mechanic needs his full complement of hand tools, and a limited number of test instruments—not nearly the space and equipment required for the full scale garage operation.

Diagnostic equipment which will be most useful for the first type of operation consists of a vacuum gauge, compression gauge, AVR set (ammeter, voltmeter, resistance), and a coil and condenser tester. Distributors and magnetos will require testing and recondi-

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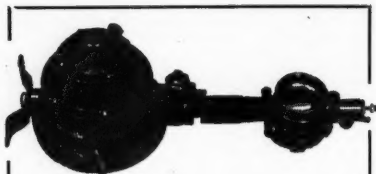
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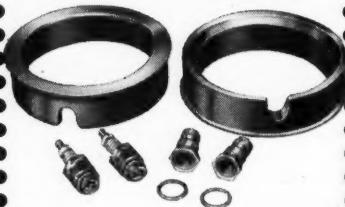
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tioning, but the equipment for working on these units is expensive. Unless the volume of work is high, it is more economical to take the units to a service shop specializing in that kind of work. For final adjustments after installation, an air-fuel-ratio analyzer and a timing light will be very useful.

Some operators get along without one or more of the above instruments, but they are taking chances which easily could be avoided with the complete line of testing equipment. Two or three cases of preventable trouble might represent the cost of all the recommended equipment.

What Garage Setup Means

For the garage operation, the recommendation is, of course, a full scale garage setup. Since work will be principally on tractors and trucks, plenty of space will be needed, as well as complete equipment for engine overhauling and general service work. It is a big undertaking and should not be gone into without having an experienced man available for management.

An important consideration in connection with the carburetor situation will be the attitude of the manufacturers and agencies of trucks and tractors. In some cases this is very favorable. The attitude of other tractor manufacturers range from neutrality to outright opposition. One should visit the agencies in his territory and find out what aid or opposi-



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Santa Fe "Custom-Built" LP-Gas Tanks are available for any Tractor or Truck requirement. Designed for fast, simple and inexpensive installation. Many stock models available, including brackets—others fabricated to specifications. Licensed and bonded in states where required. Tanks comply with N.B.F.U. requirements. U. L. approved valves—excess flow protection. Highest standards of engineering, materials, and workmanship.

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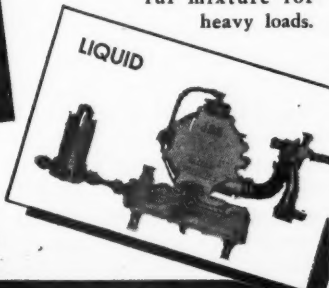
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...with Economizer automatically providing a lean, economical mixture for medium loads and rich, powerful mixture for heavy loads.



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tion can be expected from each.

Ordinarily, it will pay to have the agencies which are willing to cooperate do the conversion work on their own models. Those who are opposed should be reminded of conversions to be made on their makes of tractors, and under the circumstances the work will have to be taken elsewhere.

The attitude of the manufacturers of big trucks is uniformly favorable. There are almost always high altitude pistons or heads available for these engines, and they make most satisfactory high compression conversions. Most farm trucks are in the smaller group, manufactured by the large passenger car producers. These manufacturers as a rule do not supply high compression equipment, as they seem to feel that their passenger car engines are already high enough in compression for all practical purposes. While they do not openly approve altering the original compression ratios, they are quite accustomed to seeing it done. There is an extensive independent production of high compression conversion units for some of these models.

Passenger car conversions will be fairly infrequent until service stations handling LP-Gas are far more common than at present. There will be no help from their manufacturers, as they all have a predominant interest in standardization, and agencies which will engage in off-standard installations of this magnitude are almost unheard-of. If asked to convert any

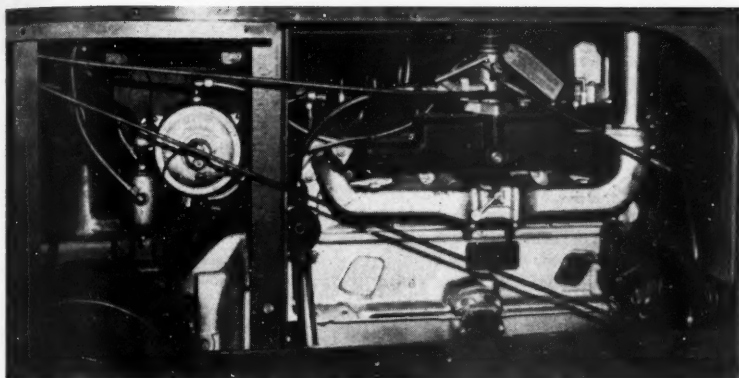
passenger cars, it will pay to check with the agencies for high compression equipment, which is available for several models.

Well versed authorities agree that a large percentage of LP-Gas dealers should sell LP-Gas conversions, especially those serving farming areas. As a means of demonstrating its practicability, a dealer should be using LP-Gas in all delivery equipment, and in any business cars operated. Arrangements should be made for making the installations, either in independent garages, tractor and truck agencies, or in the dealer's shop. Thus dealers will add to their profits through the sale of equipment, making conversions and performing service in addition to adding large potentials to total fuel sales.

Conversion Kits Simplify Field Installations

INCREASED interest in the use of LP-Gas as a tractor fuel has resulted in the production by the Farmer's Union Central Exchange, St. Paul, of a factory equipped version of the Model 3 Co-Op tractor burning LP-Gas. Engineering of the fuel system for this tractor was done under the direction of Tom Clark, field service engineer for the Century Gas Equipment Co., Los Angeles, suppliers of the carburetion equipment.

In order to facilitate the conversion of their previously produced tractors in the field, this same company is supplying a conversion kit which includes everything necessary



Factory-built farm tractor, showing the carburetion equipment of Century Gas & Equipment Co.

to make a field duplication of the factory installation—carburetor, regulator, filter, tank, 7.1:1 compression ratio head, cold manifold, and all brackets, tubes, fittings, and incidentals necessary to complete the job. It is in making up the latter odds and ends that the labor cost of conversions generally runs up. The use of the factory produced kits results in an important saving in installation time.

For proper guidance of mechanics heretofore unfamiliar with the conversion methods, a 20-page, profusely illustrated booklet is supplied, which gives complete instructions for installation, operation, and servicing, together with an illustrated parts list.

Reports coming back from farmers using the LP-Gas burning tractors have been so favorable that a similar Century conversion is being offered for the smaller tractor put out by Farmer's Union.

Conversion kits are available throughout Minnesota, North Dakota, South Dakota, Montana, and

Wyoming. In many cases LP-Gas dealers handling Century carburetors are making the conversions, using the complete kits to save time and cost.

Displays at Gulf Coast States Fairs Boost Gas for Tractors

The General Gas Corp., butane-propane dealer in Louisiana and Mississippi, last month launched an educational program for the farmers and future farmers, on the "Hows" and "Whys" of tractor conversion to liquefied petroleum gas. This program, in the form of a colorful, graphic display, was shown during the major fairs, farm and festival exhibits and 4-H and "Future Farmers" meetings in the Gulf Coast states.

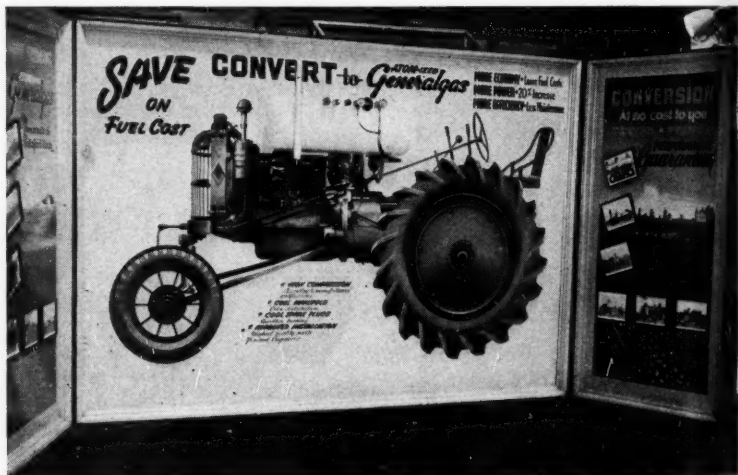
The farmer had been hearing about converting his tractor and implements to LP-Gas operation but he was getting little or no facts and figures. He wanted to know "How" the conversion is made, "What" parts are need-

ed, the possible results under comparable conditions and, of course, the cost for the conversion and operation. To answer these questions and answer them in a way that would not only do the selling job, but also the educational job for future farming was General Gas' objective.

Backing the plan was I. W. Patterson, vice president and general sales manager; Wharton LeBlanc, chief engineer, and Max Fetty, sales promotion manager. Discussion brought forth the construction of an 8' x 12' display. The center panel is the picture of a tractor, drawn to scale. To this detailed drawing was attached a fuel tank, a hand carved manifold, filter, vaporizer and carburetor. The two side panels (8' x 4') are painted in a colorful farm scene, depicting the general terrain and conditions familiar to the Louisiana and Mississippi

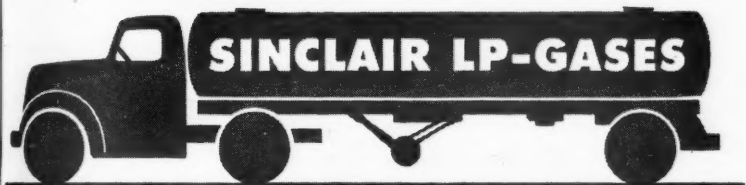
rural areas. To these side panels, and to further explain the wide variety of LP-Gas uses, a series of pictures was attached. Pictures are of conversions on rice farms, cotton plantations, sugar cane fields and general farming. These conversions range in size from the 1- and 2-tractor farms to the 22-tractor, three hoist engines and domestic conversions of the large plantations in southwestern Louisiana and northeastern Mississippi.

The General Gas Corp., with their branches, coordinated the presentation of this display in their immediate areas. The branch managers, salesmen and engineers were on hand to explain, in detail, the conversion to LP-Gas, to answer questions, help in every way possible to give the farmer a clearer picture and give him something to think about now and in the future.



This display, prepared by General Gas Corp., was shown at many Louisiana and Mississippi fairs to spread information on farm operations with LP-Gas-powered tractors.

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It's the "stowaway" that rides in every shipment of SINCLAIR LP-Gases from the refinery to the consumer. Packed into SINCLAIR LP-Gases is a Hidden Ingredient composed of important things like INTEGRITY, REPUTATION, RESPONSIBILITY, PERFORMANCE, and REAL SERVICE.

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LP-Gas Filling Station Directory

Owners of LP-Gas filling stations all over the United States, Canada, and Mexico are urged to send information concerning their locations and services to BUTANE-PROPANE News, 198 S. Alvarado St., Los Angeles 4, Calif.

These names will be compiled later in book form and distributed to trucking firms and individuals who wish to patronize such filling stations. There is no charge for such listings.

Information furnished should include station name, street address or highway number, nearest town, owner's name, and kind of services offered.

ALABAMA

Dothan

Southern Liquid Gas Co.
508 - 3rd Ave.
Open 24 hrs.
Conversions; services.

Gadsden

American Gas Corp.
Forrest Ave.; Hwy. 241.

Selma

Superior Gas & Appl. Co.
Hwy. 80, West.
Night phone: 2391-W.
Conversions; service.
William H. Shultz.

Snowdown

Capital Liquid Gas Co. Inc.
State Hwy. 9, 9 mi. S. Montgomery.
W. J. Gordy, Jr.

ARIZONA

Casa Grande

Fannin's Gas & Equip. Co.
611 E. Main (E. of town).
Conversions; service.
J. B. Brown, Mgr.

Flagstaff

Northern Arizona Gas Service.
Phoenix Ave. & Sitgreaves St.

Holbrook

Schuster Gas & Equip. Co.
101 N. Central Ave.

Kingman

Mohave Butane Gas Service
6th & Front Sts. (Hwy. 66)
Conversions; service.

Parker

Fannin's Gas & Equip. Co.
E. of town on Main St.
Troy Blanton, mgr.

ARKANSAS

Batesville

High-View Inn Service Sta.
1 mi. S. Batesville, Hwys. 11 & 25.
Conversions; service.

White River Distributors Inc.
Lower Main St.
Conversions; service.
Phone: 570 & 1246.
Preston Grace.

Calico Rock

White River Distributors Inc.
Conversions; service.
Phone: 66.

Fayetteville

Cy Carney Appliance Co.
2 E. Center St.
Conversions.
Cy Carney.

Newport

White River Distributors Inc.
1 mi. N. of Newport, Hwy. 67.
Conversions; service.
Phone: 534.

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Mountain Liquid Gas & Appl. Co.
Hwy. 395.
Service.

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4030 Hollis St.
Open 24 hrs.
Conversions; service.

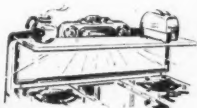
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O'KEEFE & MERRITT
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Open 24 hrs.
Frank W. Foster.

COLORADO**Denver**

Red Dot L-P Gas Co.
3801 E. 56th Ave., 1 blk. W.
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F. S. Clem.

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H. J. Williams Co.
Hwy. 6, 34; 510 Platte Ave.
Conversions; service.
H. J. Williams.

GEORGIA**Atlanta**

Southern Gas Corp.
1039 Boulevard, S.E.
Conversions; service.

IDAHO**Nampa**

American Propane Co.
104 2nd St. So.
Conversions; service.
Night phone: 1516 NW.
O. M. Cox, mgr.

Knu-Gas

110 - 2nd St. So.
Conversions; service.
C. N. Knudsen.

Pocatello

Northwest Butane Gas Inc.
395 Yellowstone Hwy.
Night phone: 1260-W.
Service.
L. J. Thatcher.

ILLINOIS**Waverly**

Thriftane Gas Co.
137 Pearl St.
E. A. Ritter, mgr.

INDIANA**Evansville**

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1179 Diamond Ave., 2 blks. W.
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IOWA**Oskaloosa**

Allied Gas & Fuel Co.
Hwy. 68, across from airport.
Night phone: 2160.
Thomas E. Steward.

Pulaski

Augspurger Gas Service
G. W. Augspurger.

Quimby

Simonsen Mill-Rendering Plant
1 mi. W. of Quimby.
Open 24 hrs.

Simonsen Propane Service
1 blk. E. of post office.
Open 24 hrs.; Phone 63.
C. E. Coleman, mgr.

KANSAS**Deerfield**

Deerfield Petroleum Inc.
Hwy. 50, 1 mi. W. of town.
Open 24 hrs.

Liberal

54 Gulf Service
Hettic Gas Co. (owner).
Hwy. 54, 1 blk. from Hwy. 83.
Conversions; service.

Stafford

B. I. Whitlock Butane Co.
Hwy. 50-S.
Conversions; service.
B. I. Whitlock.

KENTUCKY**Ludlow**

Rural Natural Gas Co.
4 Highway Ave. State 20.
John S. Bolan.

Walton

DeMoisey Gas Co.
Hwy. 24 & 16, N. of Walton.
F. M. DeMoisey, owner.

Warsaw

Webb Gas & Appliance Co.
Conversions.
Melvin E. Gayer.

LOUISIANA**Shreveport**

Red River Butane Co.
Hwy. 80.
Open 24 hrs.
Conversions; service.
C. C. Hawkins, owner.

MINNESOTA**Lewiston**

Minnesota Butane & Equip. Co.
Hwy. 14; East edge of town.
Phone 76.
V. A. Bohr.

MISSOURI**Kirkwood**

Kirkwood Propane Gas Service
Hwys. 66, 61, 67; 1200 S. Kirkwood
Rd., 2 blks. S. city limits.
P. M. Perkinson, mgr.

MONTANA**Great Falls**

Geo. Steele & Co.
807 - 3rd St. NW.
Conversions; service.

Kalispell

Propane Co.
3rd Ave. E, N.
Conversions; service.
P. C. Bird.

Missoula

Propane Co.
500 N. 2nd E.
Conversions; services.

NEVADA**Ely**

Junction Service Station
City Gas & Appl. Co. (owner).
Open 24 hrs.
Conversions; service.

NORTH CAROLINA**Kenly**

Blue Flame Gas Co.

Hwy. 301, 2 mi. S. of town.
Night phone: 2061 or 3201.
J. G. Blow.

NORTH DAKOTA**Dickinson**

Dickinson Flamo Gas Co.
Hwy. 10.
Conversions; service.
Ernest Braun.

OHIO**Ripley**

Ripley Gas Service
Crossroads, Hwy. 62 & 74.
Dorothy Meranda, mgr.

OKLAHOMA**Elk City**

Howard's Butane-Propane Co.
East 66 Hwy.
Open 24 hrs.
Phone: 12.
Conversions; service.
J. D. Howard.

Stillwater

Central Butane, Inc.
1 mi. S. of city on Hwy.
Conversions.
W. H. Cleverdon.

OREGON**Bend**

Oregon Hydro-Gas Co.
1st & Irving St.
Conversions; service.
Night phone: 48J or 32F11.

Clarkdale

Verde Valley Butane Co.
Hwy. 89A.
Conversions; service.

Gold Beach

Gold Beach Modern Gas
Hwy. 101.
Hubert T. Shields.

SOUTH CAROLINA**Marion**

Green's Fuel of Marion
605 N. Main St.
J. B. Coleman.

SOUTH DAKOTA

Aberdeen

Kettering Truck Service
Hwy. 27, 1 mi. S. of town.
Conversions; service.
Night phone: 3669.
C. Kettering, mgr.

Parkston

Parkston Co-op. Assn.
G. J. Schladweiler, mgr.

Rapid City

Hills Gas & Appliance Co.
7th & Philadelphia St.
Phone: 3550.
George Parsons, mgr.

TENNESSEE

Lebanon

70 Service Station
Lea's Butane Gas Co. (owner).
Hwy. 70; 1 mi. E. of city.
Harry Lea, owner.

Millington

Shelby County Bottle Gas Co.
Hwy. 51 at Navy Rd.
14 mi. N. of Memphis.
Samuel D. Houston, mgr.

TEXAS

Cameron

Central Butane Co.
1004 N. Travis; Hwy. 77 & 36.
R. W. Wells, mgr.

Hudson's Truck Service
Hwys. 77 & 36; 1 mi. N. of city.

Dallas

Delcambre Bros. Butane Gas Sales
10520 Hines Blvd.
A. L. Delcambre, mgr.

Decatur

Warren Butane Co.
S. Hwy. 24; Fed. Hwy. 181 & 287.
Wise county.
Phone: 2621.

Junction

Borden Co.
301 E. Main, Hwy. 290 & 83.
E. M. Borden.

Rockdale

Phillips 66 Station.
Hwy. 79 at railroad.

Tornillo

Valley Butane Co.
Hwy. 80, 35 mi. E. of El Paso
24-hr. service
A. R. Sanders, Jr.

VIRGINIA

Richmond

Bottled Gas Corp. of Va.
1701 Brook Rd., 2 blks. E. of Hwy. 1
E. O. N. Williams.

WASHINGTON

Anacortes

Fidalgo Gas & Electric Co.
2420 Commercial Ave.; Hwy. 1.
Raymond V. Galyean.

Port Angeles

Elliott Propane Gas
709 Marine Dr., 7 blks. W. of
city center off Hwy. 101.
William J. Elliott.

WISCONSIN

Antigo

City Gas Co. Gas Plant
1 blk. W. Hwy. 45, S. of city;
126 S. Clermont St.
Dale L. Madeson.

West Sturgeon Bay

Betts Propane Service
Nautical Dr.
Conversions; service.
Al Betts.

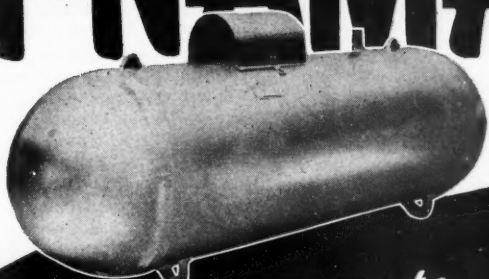
Power News

Detroit is one of the most recent cities to test the use of propane in its street railway system which operates the local buses.

These buses operate over 200,000 miles per day and at the current price of propane would save \$5000 daily by converting existing equipment.

Fort Wayne, Ind., has joined other American cities in installing propane buses on its streets. They will be Twin Coaches and will be operated by Fort Wayne Transit, Inc.

McNAMAR



*The Name to
Remember -
for*

- DOMESTIC TANKS
- STORAGE TANKS
- FUEL TANKS
- TRUCK TANKS

Even though materials have been hard to get — we want you to know that McNamar is still in business, and we do our very best to take care of your requirements.



McNamar Boiler & Tank Co.

PLANT NO. 1 — BOX 868, TULSA, OKLA.

• PLANT NO. 2 — BOX 206, E. ST. LOUIS, ILL.

Flame Symbol Builds Friendship

It pays to be known as a friendly LP-Gas dealer.

Just ask T. M. Feely, of Indianapolis.



Mr. Feely, owner of Indianapolis Bottled Gas Co., and president of the Indiana LPGA, is thoroughly sold on the value of good customer relations.

For some time, he has seen the need for an advertising character to symbolize

the friendly gas service rendered by his firm . . . a character that could be used in every form of promotion as his own personal trade mark.

Early this year, Mr. Feely adopted and introduced "Handy Flame" as the friendly spokesman for his company. Since that time, he has used the character whenever possible to give his advertising and sales promotion a friendlier, more personal touch.

Recently the firm moved to larger quarters at 612 Virginia Ave., a mile from downtown Indianapolis. To notify customers of the move, cards were mailed out bearing the figure and a message from Handy Flame. Handy told about the move, gave the new address and phone number, and asked customers to look for the friendly blue Handy Flame sign outside the new store.

Customers found the new location

easy to spot—thanks to a large colorful two-faced neon sign in blue, red and orange. The Handy Flame figure, in light blue neon, points to the firm name.

To attract passersby on busy Virginia Ave., Mr. Feely keeps the sign and appliance display room lighted at night. On Indianapolis Bottled Gas delivery notices, Handy tells customers, "We'll be out to check your supply of GAS next week." After establishing a friendly atmosphere, Handy goes on to explain, "If it is necessary to replenish your supply, kindly pay our deliveryman the net amount shown on the delivery receipt. To save you money, all deliveries are on a cash basis, payable when gas is delivered."

On overdue accounts, the company sends a special statement on which Handy Flame is shown tipping his hat and greeting the customer with, "Say, boss, you forgot my pay." Mr. Feely points out that few customers can take offense at such a friendly approach.

As a follow-through, Indianapolis Bottled Gas also uses the Handy Flame figure on its customer bills, letterheads, business cards, cylinders, and in newspaper and telephone directory advertising.

Appliances on the sales floor all have price tags carrying an illustration of the same symbol.

Favorite give-away used by the firm is a pot holder with a sales message on gas cooking.

The overall effect of this type of promotion, according to Mr. Feely, is that Handy Flame helps put his customers and prospects in a friendlier frame of mind—easier to talk with and easier to sell.

NOTE: Handy Flame is reproduced by permission of the copyright owner, W. H. Rohr, Jr., P. O. Box 302, Indianapolis, Ind.

West Coast Service School Has Successful Session

Students from California, Oregon, Washington, Idaho, Arizona, Nevada, British Columbia, and even as far removed as New York, attended the Sept. 6-8 short course at the University of California, Berkeley. The school was so well received by the 125 in attendance that plans are under way for another one to be held next year. Of this number, 20 were insurance men. Representatives from Army and Navy also attended.

W. A. Buehler, chairman of the committee for the Western LP-Gas school and K. B. Jacobsen, LPGA West Coast secretary, were ably assisted by Dr. Helen V. Hammarberg of the University of California in making arrangements at the university. Mr. Buehler acted as chairman at the opening session following a welcoming address from Anders J. Carson, professor of petroleum engineering and chairman of the division of mineral technology at the College of Engineering. Henry Haar, Acme Butane & Appliances, Fresno, Calif., also acted as session chairman.

Instructors included the following: Oliver Johnson, Standard Oil Co. of Calif.; O. N. Simmons, Ward Heater Co.; Earl M. Evleth, Bastian-Blessing Co.; Robert C. Lisk, Fisher Governor Co.; L. W. Smith, Smith Precision Products Co.; R. C. Harris, Suburban Gas Service, Ontario, Calif.; A. E. Drucker, General Water Heater Co.; A. J. Horn, Payne Furnace Co.; A. W. Beck, Grayson Controls Div.; W. H. Christensen, Minneapolis-Honeywell Regulator Co.; George B. McClellan, Williams-Wallace Co.; and L. C. Ginn, Western Stove Co.

Legal News

The city council of El Monte, Calif., trailer coach rendezvous, passed an ordinance in August that all LP-Gas tanks under 100 gals. must be located at least 300 ft. from the nearest building; over 100 gals., 600 ft.

What will trailerites do? What will any of you do?

NBFU Pamphlet 58, with limited additions, is now the official code for Kentucky.

There are three kinds of permits necessary in Kentucky: one to transport the fuel, one to service and install, and one for each worker who makes installations or services LP-Gas systems. Permit fees are \$25 each.

There is no hope for removing the excise tax on gas appliances. A resolution with such a purpose has been tabled by the Senate finance committee because of the current war situation.

A recent LPGA bulletin says that beginning Aug. 1 and continuing until next Feb. 1, unless sooner changed, an Interstate Commerce Commission service order covering computation of demurrage charges on freight cars loaded or unloaded in the U. S. provides that current tariff rules which exclude Saturdays and Sundays in the assessment of demurrage are set aside. Demurrage will be charged on Saturdays and Sundays the same as on weekdays. Reason: Current shortage of rail equipment. Saturdays and Sundays are still excluded in the "free time provision" but if the free time expires demurrage is charged for every day.

New Edition of Pamphlet 58 Published by NFPA

The National Fire Protection Assn. has recently issued a revised pamphlet No. 58 which is the universal guide for safe practices in the liquefied petroleum gas industry. It is titled "Standards on the Storage and Handling of Liquefied Petroleum Gases, No. 58."

This new pamphlet is the result of much revision of the NBFU Pamphlet 58 which was last issued in March, 1949. Many recommendations for changes were made by the Technical and Standards Committee of the Liquefied Petroleum Gas Assn. and exhaustive research into industry changes and developments has helped to broaden the scope of the new edition. The research was under the direction of the NFPA Committee on Gases.

The new 1950 edition is available from the executive office of the National Fire Protection Assn., 60 Battery March St., Boston, Mass., for 35 cents a copy. A similar text with the same pamphlet number is in the course of publication by the National Board of Fire Underwriters.

Liquefied Gas Corp., Seattle, Opens New Bulk Plants

Two new LP-Gas bulk plants have been added to the facilities of Liquefied Gas Corp., the Seattle firm headed by C. M. Ambrose, Jr. The plants are located at Monroe and Puyallup, Wash., and were designed primarily to cut distribution costs.

Each plant has 18,000-gal. propane storage tanks; each has new showrooms adjacent. Each will serve an area of about 60 miles in western Washington, and will make LP-Gas available to the rich farmlands of the

territory. Liquefied Gas Corp. now has a total of five plants in Washington, the other three being in Seattle (the home plant), and at Mt. Vernon and Olympia. The late C. M. Ambrose, Sr., established the Seattle plant at its present site 12 years ago. It has facilities for 34,000 gals. storage of propane, and 18,000 gals. butane.

Each of the new plants has two bulk delivery trucks with which to serve its area. Both of the plants will have truck-filling facilities, Mr. Ambrose said. The company is very interested in the trends to the use of LP-Gas for power, and will launch a campaign in the rich farm area it serves to convert tractors and farm equipment to LP-Gas, he said.

New Chemical Dictionary Covers Vast Field

The rapidly developing chemical industry has afforded the Reinhold Publishing Corp. an unusual opportunity to compile 800 pages (two columns to the page) of chemical terms and interpretations that are vitally needed in industry at this time and references to which appear frequently in current news releases.

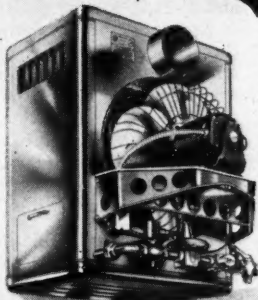
In all, there are 23,000 entries giving up-to-now authoritative information on chemistry, raw materials, trade names and processes, including definitions of hundreds of common terms.

This is the fourth edition of the "Condensed Chemical Dictionary," completely revised and with 5000 items not published before. These include numerous entries of words and terms concerned with the production and chemical utilization of liquefied petroleum gas and other petroleum products.

Priced at \$10, copies can be had from the Reinhold Publishing Corp., 330 W. 42nd St., New York City 18.

REZNOR

Automatic Gas
Unit Heater



SUSPENDED
OR
FLOOR TYPE



SELL ALL TYPES OF DIFFICULT PROSPECTS

Heater prospects can't make up their minds? Then pep up your sales talk with facts about Reznor's far-advanced heat exchanger. Point it up, tell how "Plymetal" resists temperatures of 1250°F., a 42% safety margin! Tell how "Plymetal" transfers heat triple-quick.

SELLING MADE EASIER

New, free, informative booklet gives you profitable tips on how to sell. Send coupon below for your copy of "Reznor Heaters Sold Rightly Sell Easily."

TALK ABOUT REZNOR'S EXCLUSIVE "PLYMETAL"

The name "Plymetal" identifies America's fastest selling unit heater . . . Reznor.

REZNOR MANUFACTURING CO.

4 UNION ST. • MERCER, PENNA.

Gentlemen: Please send me my copy of

"REZNOR HEATERS SOLD RIGHTLY SELL EASILY"

NAME _____

FIRM _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

PRODUCTS



SAFETY FIRST FIRE EXTINGUISHER

Portable Fire Extinguisher

Safety First Co., Elmsford, N. Y.
Model: Safe-T-Meter.

Application: Specially useful for cars, buses and trucks, and for factories, garages, barns, and farm buildings.

Description: The extinguisher uses dry chemicals in which nitrogen is infused under pressure and is available in 2½ and 4-lb. models. Light weight, compactness, and simplicity of operation are features of the extinguisher. A gauge on the handle reports need for recharging. Recharging can be

done by the operator. The extinguishing chemical is harmless to furnishings.

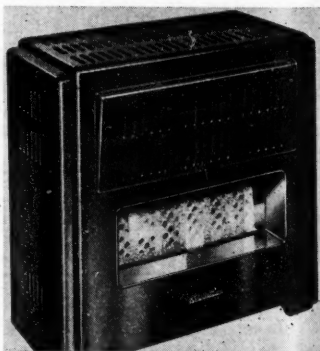
Approved by Underwriters' Laboratories, it has a service rating of B-2 and C-2; it can be used on any kind of fire. It is specially effective on LP-Gas, gasoline, oil, grease and electrical equipment fires, and controls fires such as rubbish, paper and textiles. The extinguisher can be shut off at will, thus retaining the quantity of chemical that is unneeded in any given instance.

Vented Circulator

Perfection Stove Co., 7609 Platt Ave., Cleveland 4, Ohio.

Model: VR35.

Description: This 35,000-Btu model is a low-boy with six radiants. It is equipped with manual control valve,



PERFECTION CIRCULATOR

BUTANE-PROPANE News

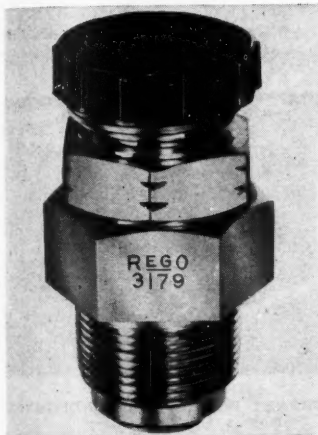
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OCT

pressure regulator, porcelain-enamelled radiator and blue flame pilot which, when combined with a thermostat, makes possible fully automatic heating.

This heater is finished in brown porcelain enamel. Like the company's other gas models, the VR35 is AGA tested and approved for all gases.



REGO FILLER VALVE

Filler Valve

Bastian-Blessing Co., 4201 W. Peterson Ave., Chicago.

Model: Rego 3179 Series Double Check Filler Valve.

Application: Designed to yield a 25% increase in filling rate and to reduce possible jamming of the check valves by foreign matter.

Description: The new valve is offered in both 1½ and 1¼-in. NPT thread sizes and has an approximate filling rate of 33 gals. per minute at 10 lbs. psi drop across the valve.

The previous series 3178 filler

valves has been redesigned to reduce the possibility of foreign matter becoming lodged in the upper check valve and thereby jamming open the lower check. To avoid this, the new upper check has 100% more movement, allowing the lower check to close completely while the upper check disc is ¼ in. from the closed position.

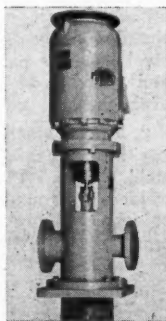
This series allows for removal of the upper valve assembly for inspection or replacement, without the withdrawal of the tank contents. The 3179 filler valve is approved by the Underwriters' Laboratories.

Centrifugal Pump

Peerless Pump
Div., Food Machinery & Chemical Corp., Los Angeles 31.

Model: Hydro-Line Pump.

Application: Suited for applications where net positive suction head is limited and where space is at a premium; can be used for pumping LP-Gas, oil, gasoline, hot or cold water, and other hydrocarbons.



PEERLESS PUMP

Description: The Hydro-Line consists essentially of a vertical, close-coupled rotative shaft turbine pump, enclosed in a steel jacket or barrel. The pumping unit is ordinarily furnished complete with motor, motor-pump couplings, discharge casting with suction and discharge flanges, and multi-stage pump.

Capacities up to 5000 g.p.m. are

obtained; maximum head is 1500 ft. All types of drives are available. The Peerless mechanical shaft seal is recommended and furnished on the pump when liquids under high pressure are to be handled.

Counter Equipment

Anetsberger Bros., 216 N. Anets Dr., Northbrook, Ill.

Application: Commercial cooking establishments.

Description: The equipment consists of four items. Seen in the accompanying illustration they are, left to right:

1. An 11-in. x 11-in. counter filter fryer featuring a new design kettle, powerful burner and radiants. Kettle is of smooth construction, making cleaning easy. Cabinet is stainless steel, permits easy banking of units, and low height eliminates recessing of back-bar.

2. Thermostatically controlled "grillator" has a 1/2-in. nickel alloy steel plate. Plate is electrically welded to rounded rims and back-splash, thus preventing grease seepage. Grease-well receptacle is welded to plate with a lift-out tray.

3. Hot plate has new grid top designed to hold the smallest pans and facilitate their handling. It has removable splash tray and burners.

4. Food warmers are dry gas



ANETSBERGER COUNTER EQUIPMENT

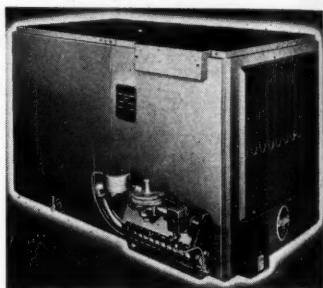
heated with a temperature range of 100° to 200° to handle hot food storage and serving needs.

Winter Air Conditioner

Bryant Heater Div., Affiliated Gas Equipment, Inc., 17825 St. Clair Ave., Cleveland 10, Ohio.

Model: Bryant 324.

Application: Primarily designed for attic installations, but basement



BRYANT WINTER AIR CONDITIONER

or utility room installation can be made by supporting it from the floor or suspending it from the ceiling.

Description: Completely automatic, available in two capacities of 100,000 and 125,000 Btu, the unit is AGA-approved for attic installations for use with LP-Gases, natural, manufactured and mixed. Shipped as a complete factory assembled and wired unit, Model 324 consists of two basic parts: front section containing 12-gauge exchanger, burners, controls, and draft hood, and rear section housing blower, blower motor, and filters.

Controls and draft hood can be mounted on either right or left side with draft hood opening facing front

or back. Cleaning of heat exchanger can be done without disconnecting the ductwork.



ATLAS DETECTOR

Gas Detector

Atlas Exploration Co., 1911 W. Alabama, Houston, Texas.

Model: Probetector.

Application: For detecting 0.1 of 1% butane in air; designed to give immediate readings on scale showing lower explosive limit of butane gases in the atmosphere.

Description: Readings are continuous and instantaneous; no aspirator bulb is required in operation. The instrument case is rust-proofed and of durable metal; parts are of anodized aluminum and battery and other working parts are enclosed so that they are weather tight and dust free. No pumping and diluting of gases can occur in testing.

The detection element is within the

probe, which may be immersed in butane, water, or other fluids without harmful after effects. The power utilized for the Probetector is one storage battery which can be used continuously for 40 hours and may be recharged in 12 hours for a similar period of service.

Size of the instrument is $3\frac{1}{4} \times 4\frac{1}{4} \times 8$ in.; total weight, including probe, is less than 8 lbs.

Gas-Fired Furnace

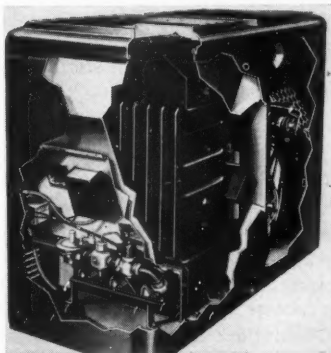
Ingersoll Steel Div., Borg-Warner Corp., 310 S. Michigan Ave., Chicago.

Model: Ingersoll Series GL.

Application: Designed for basements or where space is limited, as under stairs or in an alcove.

Description: This is a compact winter air conditioner ranging in size from approximately 78,000 Btu's through 125,000. Compactness is due to the inclusion of a "wedgetube" heat exchanger. Two smaller lowboy models occupy only 20 x 50 in. of floor space; larger models, 20 x 54-in. space.

AGA-approved for LP-Gas, natural,



BORG-WARNER FURNACE

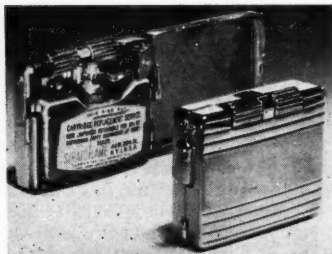
mixed, manufactured, and LP-Air gases, the units are factory assembled and wired. Finish is a blue-green, baked enamel.

Pocket Lighter

Stratford Pen Corp., 44 W. 28th St., New York City.

Model: Stratoflame.

Description: This butane-operated cigarette lighter has no wick, fluid,



STRATFORD POCKET LIGHTER

nor odor and needs refilling only once every four or five months. It uses a butane cartridge and release valve which eliminate the wick and fluid.

Stratoflame lighters come in a variety of cases—chrome, gold plated, black enamel, gold tone, sterling silver, and solid gold.

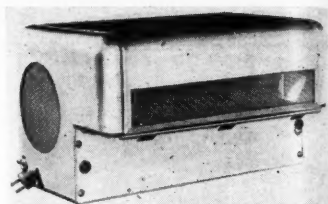
Heat Booster

Ohio Foundry & Manufacturing Co., Steubenville, Ohio.

Model: Brilliant Fire Heat Booster.

Application: This device is an accessory for use with vented circulating heaters of the gravity type.

Description: The heat booster is especially engineered to accelerate warm air circulation in hard-to-heat



OHIO FOUNDRY HEAT BOOSTER

rooms, to direct the heat into living zone of room, and to prevent stratification of heat at ceiling by means of an adjustable hanger. It can be attached to most any circulator having a top grille—gas, oil, wood, or coal-fired.

In hot weather, detach the booster from heater, place on desk, floor, in window, etc., and use to circulate fresh air.

The cabinet houses twin blower wheels powered by double-shaft micromotor on resilient mounting. It is of shatterproof construction. A 115-volt, 60 cycle a/c circuit operates the booster.

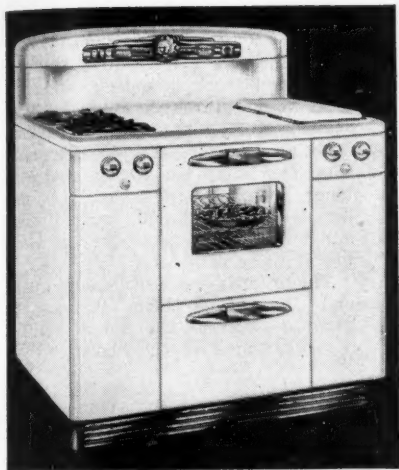
Electric Controller

McDonnell & Miller, Inc., Wrigley Bldg., Chicago 11.

Model: McDonnell No. 65.

Application: For water tanks, receivers, and other liquid storage systems. Can be used to make or break electrical circuits at either high or low levels: controlling motors, signal lamps, electrical elements, etc.

Description: The new explosion-proof float-operated electric controller has been Underwriters' tested and approved for Class I, Group D and Group C classifications. The float switch incorporates packless construction, heavy-duty mercury switch, and

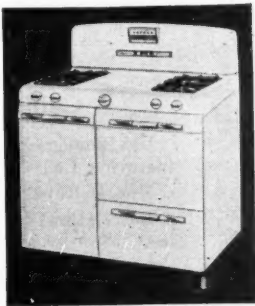


CP-669—Completely automatic with every feature found on city gas models.

● Ever since 1925 Tappan has been designing and developing LP gas ranges. LP dealers have been selling more and more Tappan LP ranges every year.

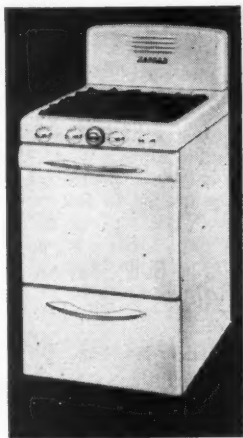
Tappan is first choice of both dealers and users, because Tappan LP ranges have exclusive features and are backed by powerful LP sales helps. LP models in every price bracket. All carry attractive margin for you.

DD-72—Deluxe in appearance, but popularly priced.



TAPPAN

the LP pioneer
still leads the field
...will lead you to
profitable sales



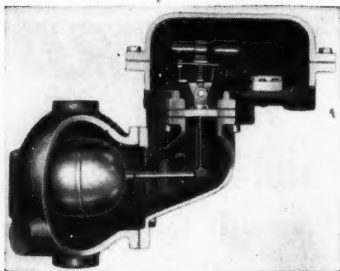
G-70—Compact, highly styled, for 20-inch floor space.



Your guide to the
best in modern
automatic cookery

THE TAPPAN STOVE COMPANY • Mansfield, Ohio

For 69 years the makers of fine ranges



McDONNELL CONTROLLER

totally enclosed wiring and terminals.

It is furnished with a standard switch that breaks the circuit with falling liquid level, but a reverse acting switch is available for completing the circuit.

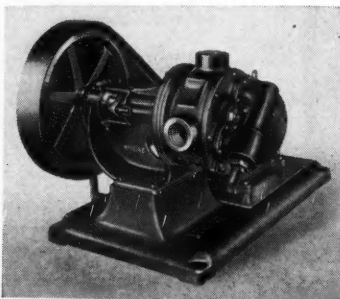
Float chamber is heavy cast iron, float is copper, float rod is brass, and bellows are bronze. Maximum body pressure is 40 lbs.

Bulk Station Pump

Viking Pump Co., Cedar Falls, Iowa.

Model: No. 182.

Description: This new Viking V-belt motor drive pump is available in

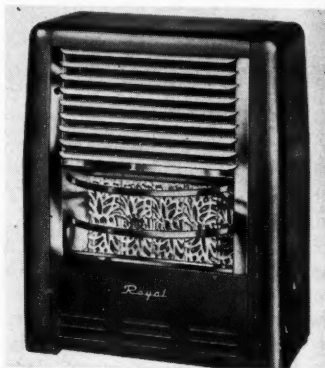


VIKING PUMP

5, 10, 20, 30, and 55 g.p.m. sizes. It is one of a new line of LP-Gas pumps which includes a hand-drive transfer pump and truck mounting pumps.

Among features is a special long stuffing box with metallic packing especially prepared for handling LP-Gas. The pump has a non-lubricated inner bearing for handling dry liquids and a special treated head and bracket gaskets to prevent leaking at these points.

The drive is enclosed in semi-guard and static-proof belts running in grooved sheaves. The pump includes a safety valve on the head.



CHATTANOOGA HEATER

Cabinet Heater

Chattanooga Implement & Manufacturing Co., Chattanooga, Tenn.

Model: Royal Kool Kabinet.

Description: Using directed flow heat, the new model is equipped with the Royal super-heat cast iron burner. It is available in two sizes: 20,000 Btu (27 x 22½ x 10¾ in.) and 40,000 Btu.

Special attention has been given to

the outward appearance of the heater and it is finished in "Sun-Glow" tones.

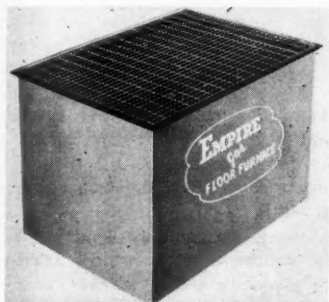
Floor Furnace

Empire Stove Co., Belleville, Ill.

Model: Lo-Boy.

Description: Requiring a minimum of floor opening, 30 5/16" x 34 5/16 in., and only 24 in. from top to bottom, the new furnace has an input rating of 70,000 Btu.

Designed for use in new or old homes, with or without basements, the new model operates on LP-Gas, natural or manufactured.



EMPIRE FLOOR FURNACE

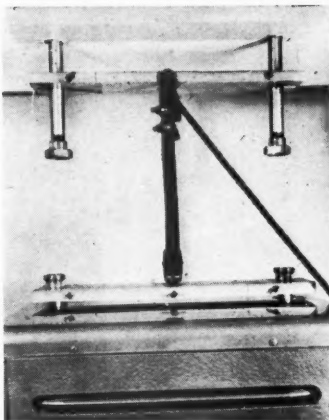
Lift Assembly

Reznor Manufacturing Co., Mercer, Pa.

Model: Lift Assembly.

Application: For use in hoisting and lowering unit heaters.

Description: Use of the assembly is said to cut installation costs by as much as 50% and save up to 50% of time normally required to install heaters. It raises heaters within 7 in. of the ceiling and can be used with or



REZNOR LIFT ASSEMBLY

without the 24-in. and 36-in. Reznor hanging boards which serve as anchors for hoisting heaters by block and tackle or electric hoist.

The assembly can be used repeatedly for any type installation and serves to lower and raise heaters for cleaning purposes.

Gas Furnace

Economy Gas Furnace Mfg. Co.,
10 S. La Salle St., Chicago 3.

Model: Evenflo.

Description: This self-contained, compact unit can be installed in utility room, attic or basement. Compact assembly of all control units, including manual and automatic control, provide easy accessibility.

Up to 54,000 cu. ft. of cleaned air per hour are delivered through double filters and forced air system. Modulation control system stabilizes home temperature. Flame modulation insures a constant flow of even heat.



ECONOMY FURNACE

Evenflo jet burners have sufficient capacity for 4 to 8-room homes. The unit operates with propane, natural, mixed or manufactured gases, and carries AGA approval.

Surface Combustion Bulletin

Developments in the dry (gas) cyaniding process since its first appearance in 1945 are presented in a new bulletin from the Surface Combustion Corp. Intended to bring metallurgists and heat treaters up to date, the latest equipment and its application in the field are presented.

Copies of the bulletin (SC-145) can be obtained by writing Surface Combustion at Toledo 1, Ohio.

Metal Hose Catalog

Industrial metal hose, tubing and fittings for conveying solids, fluids, or gases at elevated pressures and temperatures are described and illustrated in a new 12-page catalog recently issued by Universal Metal Hose Co.

Typical applications for each hose classification are listed. Specifications are organized for easy reference and cross-section photographs give close-ups of construction detail.

Covered in the catalog are Universal square-locked flexible tubing, inter-locked flexible hose, seamless flexible hose, diesel engine exhaust hose, hose assemblies, and couplings.

Copies of the catalog, No. U-10, may be obtained by writing the company at 2133 S. Kedzie Ave., Chicago 23.

Products Information

Ray-Glo Corp., Shelbyville, Ind., manufactures a complete line of gas heating units. All have their standard Ray-Glo combustion units with no adjustments to make. The Ray-Glo burner insures positive complete combustion without adjustment. It eliminates odors and all danger of carbon monoxide, the manufacturer states.

Among the units made by Ray-Glo are mantel inserts which fit most fire places, a choice of two types of bathroom heaters, six models of open radiant fixtures for the fire place, and a type and style of vented or unvented heater that will meet all needs. Ray-Glo's patented combustion features are used in all units.

GAS COSTS LESS

Gas is faster, easier to cook with. Its heat is instantaneous and controllable from a pin-point simmer to high-boil. Service is uninterrupted. Yet with all these extras a new gas range costs less to buy, less to install, less to operate—less than any other comparable modern range.

THE TRADE

The American Meter Co. has announced the election of John C. Diehl as president. Mr. Diehl was born in New Oxford, Pa., and educated at Gettysburg College and Massachusetts Institute of Technology. In 1919 he joined the staff of the American Meter Co. as an engineer, and was elected to the post of chief engineer in 1929. In 1934 Mr. Diehl was made vice president. Mr. Diehl is a member of the American Gas Assn. and Gas Appliance Manufacturers Assn., and is the author of numerous technical articles and books on gas measurement. Three of his books, "Measurement of Gases," "Natural Gas Handbook," and "Natural Gas Measurements," have won national recognition as text books on these subjects.

Norton McKean, president of the American Meter Co. since 1941, has resigned due to his health.

A big reorganization program was completed by Minneapolis-Honeywell Regulator Co. recently: C. F. Woods was promoted to valve division sales manager for the Southwest, with Dallas headquarters; E. J. Byrne moved from the Houston branch to succeed Mr. Woods as industrial manager at Dallas; H. W. Griesbach left the Chicago branch to become industrial

manager of the Milwaukee branch; and industrial sales staffs in Rochester and Chicago received new help in L. C. Schultz and W. E. Van Horne, respectively. W. J. Kirby went to the Los Angeles branch and P. R. Vogel to the Houston branch as added staffmen of the industrial supplies sales organization.

Included in field transfers announced by Minneapolis-Honeywell were L. E. Kennedy, from Syracuse to Atlanta; George Massey, from Atlanta to Nashville; A. R. King, from Boston to Worcester (Mass.); G. G. Walker, from Detroit to Saginaw (Mich.); W. J. Kilroy, from Detroit to Grand Rapids; and John Koerner, from Pittsburgh to Youngstown, Ohio. Carl Bohnlein left general sales to join industrial sales in the Philadelphia office, and George Jensen transferred from Chicago industrial service to industrial sales at Menasha, Wis.

Appointments of three members of Phillips Petroleum Co.'s chemical engineering division to various industry committees have been announced by Phillips' president, K. S. Adams.



D. D. BUTTOLPH

D. D. Buttolph, E. W. Evans, and P. W. Tucker were appointed to the committees to



Small but **MIGHTY!**

The HELCO model 50-A is a small regulator with large capacity. Under any climatic condition, this regulator will handle a load of approximately 100,000 B.T.U.'s per hour. It is ideally suited for trailer or marine use; will accommodate any normal kitchen load.

CHECK THESE FEATURES:

- ✓ Simplicity
- ✓ Dependability
- ✓ Rugged Construction

Dealers agree that the HELCO Model 50-A is the regulator designed for their needs.

SPECIFICATIONS

U. L. Cap. Rating.....	50 cu. ft.
Delivery Pressure.....	11 in. w.c.
Inlet Connections.....	1/4 in. pipe
Outlet Connections.....	3/8 in. pipe

Helco Products Corp.

2041 Colorado Ave., Santa Monica, Cal.

replace E. O. Mattocks, who recently resigned from Phillips to take a position with the American Petroleum Institute.

Mr. Buttolph, manager of the instrument and equipment branch, has been named to committees of the AGA, the American Petroleum Institute, Compressed Gas Assn., National Fire Protection Assn., and the LPGA.

Mr. Evans has been appointed to committees of the AGA, API, American Society for Testing Materials, and the LPGA.

Mr. Tucker is on the LP-G subcommittee of the NGAA, the specifications and safety committees of the LPGA, and the metal packages committee of the Manufacturing Chemists Assn.

Petroleum Trading & Transport Co., of Tulsa, Okla., has announced the appointment of D. L. Harlow as manager of the LP-Gas and natural gasoline products department of the company. Prior to joining P. T. & T., Mr. Harlow was associated with Universal Petroleum Co., of Tulsa, of which he had been vice president since 1946. Before joining Universal he was sales manager of Sinclair Oil & Gas Co., of Tulsa.

Interests associated with Petroleum Trading & Transport own and operate Three Rivers refinery located at Three Rivers, Texas. Mr. Harlow will make his headquarters in the Hunt Bldg., Tulsa, headquarters of P.T.&T.

William S. Thomas has recently been appointed branch manager of the Houston, Texas, office of the pump division of Byron Jackson Co. Prior to this appointment, he was branch manager for the San Francisco office of the company.

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News



A beautiful DeLuxe Binder made especially for your favorite magazine. Holds 12 copies—one full year. Magazines can be inserted or taken out in a second's time, or bound permanently for future reference. Covered with long-lasting, maroon Du Pont Fabrikoid with the name **BUTANE-PROPANE News** stamped in gold on cover and backbone. You'll be proud of these beautiful binders. \$2.00 each, post paid. Get extra binders for past files. Send them to your friends as gifts.

Send check for \$2 for each binder or \$2.50 from countries outside U.S.

Add 3% Sales Tax for California orders, and 3½% Sales Tax for Los Angeles City orders

BUTANE-PROPANE News

198 S. Alvarado St., Los Angeles 4, Calif.



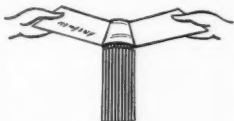
BOUND IN A FLASH

Slip open magazine under elastic band and it's bound firmly into place. Can be removed just as quickly.



OPENS FLAT

The curved backbone and patented binding system allows each magazine and page to open flat.



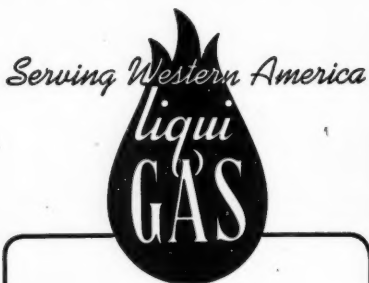
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Patented Elasto Cord supports weight of each magazine separately, no mechanical devices to get out of order.



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Liquigas distributors will tell you, "It pays to deal with a Specialist!"... become acquainted with **CALOR** and you, too, will rely on the West's leading independent marketer of LP-Gas for a more dependable supply. We have enormous reserves of top quality Butane-Propane... plus the transportation facilities.

For complete service all ways, always call or write to:

CALOR GAS COMPANY

114 Sansome Street - San Francisco 4, California
Telephone YUkon 2-3360



RICHARD KIEL

Steel Cooperage Co. division of Industrial Stamping & Manufacturing Co.

The Burnham Corp. has a new Eastern sales representative — **Richard E. Kiel** — according to announcement by **Albert J. Hall**, manager of the corporation's LP-Gas division.

Mr. Kiel is also sales representative in the Eastern area for the

Albert S. Cheyne has been appointed district manager of the new Kansas City office of **Pressed Steel Tank Co.**, Milwaukee, Wis., manufacturer of LP-Gas cylinders.

Mr. Cheyne, according to **N. A. Evans**, vice president in charge of sales, will be located at 2321 West 78th St. in Kansas City and will cover the states of Nebraska, Kansas, Oklahoma, Arkansas, Missouri (excluding St. Louis County), and western Iowa.

Resignation of **A. J. Smith** as president of **Black, Sivalls & Bryson, Inc.**, Kansas City, manufacturer of LP-Gas equipment, was announced last month. **Kenneth W. Lineberry**, a member of the BS&B board of directors who had served temporarily as chief executive officer preceding **Mr. Smith's** resignation, has been elected president.

R. E. Martin has been made sales manager of **Herron Stove & Foundry Co.**, Chattanooga range manufacturer and producer of light gray iron castings. **Mr. Martin** has a long ca-

BUTANE-PROPANE News



SIZES

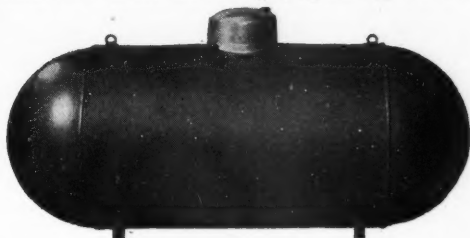
115-250-387-500 GAL.
(W.C.)

ABOVEGROUND AND
BELOWGROUND
MODELS . . .

A Burnham

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For Off-the-Main Gas Service Burnham Systems Are Best in Design, Quality, Service



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YOU GET FAST ACTION AT ONLY 15 CENTS A WORD, \$3 MINIMUM.

Closing date: 10th of previous month.

BUTANE - PROPANE News



ONE OF THE BIG THREE STANDARDIZATIONS —WELDIT TORCHES

Weldit Torches have been accepted as standard by one of the divisions of the Big 3 automobile manufacturing group. Such recognition hallmarks Weldit Torches as tops in quality and performance. Shown above is the initial shipment of rugged Weldimatic No. C-47 Lightweight Blow Pipes and No. W-46-F Heavy Duty Weldimatic Welding Torches.

Write today for technical information that will save you money in your welding operations.

Weldit
INC.
SINCE 1918

994 OAKMAN BLVD

DETROIT 6, MICH

reer in the stove industry, having been associated with Estate Stove Co., Norge division, Detroit Jewel division (Detroit-Michigan Stove Co.), and Dearborn Stove Co. Before joining Herron, Mr. Martin was sales manager of the gas division of Charles S. Martin Distributing Co., Atlanta.

New G. S. Blodgett Co. (commercial cooking equipment, Burlington, Vt.) representative in Illinois, Indiana, Wisconsin, Iowa, Minnesota, and Omaha, Neb., will be Elmer Lind, who recently joined Blodgett after 12 years with Cudahy Packing Co. and five years as representative of food service equipment manufacturers. He will headquarter in Chicago.

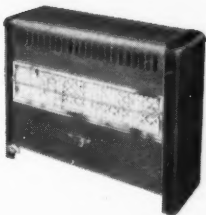
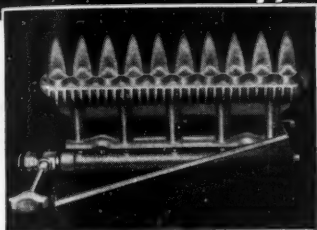
Blodgett also announced appointment of William H. Berg as representative in Ohio, Michigan, western Pennsylvania, West Virginia, and Kentucky. Mr. Berg will be located in Cleveland.

They're having a 100th birthday this year at Trageser Copper Works, Inc., Maspeth, N. Y. Just one century ago, the company, a big name in the manufacture of LP-Gas cylinders since World War II, started producing copper brewing kettles. A. H. Trageser, grandson of the founder, is president of the firm.

The Weatherhead Co., Cleveland, Ohio, announces the opening of a warehouse in Albany, N. Y. T. V. Scott, sales manager of Weatherhead's LP-Gas equipment division, has appointed Clifton Vogt as manager.

Mr. Vogt has been in the LP-Gas business for himself and for the past several years has been associated with an LP-Gas distributor in Albany.

RAY-GLO *offers the complete line*



Ray-Glo's indestructible burner has no moveable parts to adjust. No variable controls—nothing left to chance.

Ray-Glo has control valve located in the cool zone—will not dry out or leak.

Ray-Glo has stainless steel burner ports that will not rust or corrode.

Ray-Glo Burners last indefinitely

RADIANT HEATERS

UNVENTED CIRCULATORS

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MANTLE INSERTS

RAY-GLO, INCORPORATED • SHELBYVILLE, INDIANA

VIKING LP-GAS PUMPS

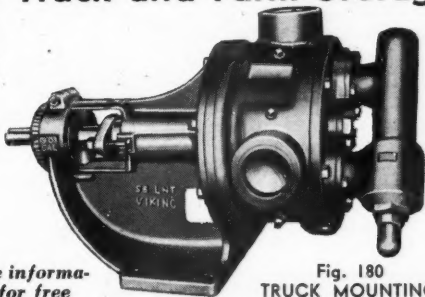
For Bulk Plant, Truck and Farm Storage

Ruggedly built with special packing, gaskets and bearing for handling LP-gas. Only 2 moving parts in pump.

Built in motorized units for bulk plant and farm dispensing. Truck mounting style illustrated.



For complete information, send for free bulletin 2303B today.



**Fig. 180
TRUCK MOUNTING
PUMP**

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The following progressive distributors
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Box 784, Hutchinson, Kansas

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SUPPLY CO.**

Baton Rouge, Louisiana

SNYDER CO.

2108 Mt. Holly St., Baltimore 16, Md.

H. J. HODES & CO.

2445 Grand Ave., Kansas City, Mo.

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ED. JOY CO.

133 Market St., Syracuse 2, New York

BRASWELL EQUIPMENT CO.

1012 Briggs St., Wilson, North Carolina

O'DAY EQUIPMENT CO.

206 N. P Ave., Fargo, North Dakota

NORTH PENN PIPE & SUPPLY CO.

Clarendon, Pa.

E. O. HABBEGBAR CO.

Fairmount Ave. & 24th St., Philadelphia, Pa.

THACKSTON DAVIS SUPPLY CO.

828 Gervais St., Columbia, S.C.

WILSON SUPPLY CO.,

Beaumont, Texas

ENGINEERING SERVICE CO.,

1703 N. Port Ave., Corpus Christi, Texas

FRANK A. LONG CO.,

810 N. Station St., El Paso, Texas

MORRISON SUPPLY CO.

Fort Worth, Texas

OIL FIELD EQUIPMENT CO.

723 Millam Bldg., San Antonio, Texas

JABAS EQUIPMENT CO.

870 Howard St., Green Bay, Wisconsin

W. F. Rockwell, Jr., president of Rockwell Manufacturing Co. has announced the appointment of L. A. Dixon, Jr., as assistant vice president of the company's meter and valve division. He will assist in the co-ordination of sales and factory problems and make his headquarters at the company's home office in Pittsburgh. For the past two years he has been the general manager of the Pittsburgh-DuBois division of Rockwell.

A. J. Kerr, vice president of sales for the meter and valve division of Rockwell has announced the appointment of Clarence E. Muehlberg as sales manager of gas products.

To succeed retiring John W. Sheffer, Edmund A. Watson has been appointed general improvement engineer of the American Car & Foundry Co. Mr. Watson has been in plant engineering and production methods work since 1915. He served as production manager at ACF's Buffalo plant until 1946 when he was appointed assistant general improvement engineer with headquarters in New York.

Mr. Sheffer, retiring after 42 years with ACF, started with the company as electrical engineer and was largely responsible for the advances made in welding at ACF plants.

American Car & Foundry also elected two new vice presidents recently. They were James F. Clark, formerly ACF treasurer, who was named vice president and treasurer,



L. A. DIXON, JR.

RECTORSEAL #2

MAKING THE L-P GAS INDUSTRY SAFER

Peerless **Gas CIRCULATORS**

A.G.A. APPROVED

Radiant and plain front fully vented models.

20,000 to 60,000 B.T.U. sizes.

Manual or Automatic Controls.

NEW Silver-Tan finish.

NEW Seam Welded gas tight heating sections.

Write NOW for complete NEW literature on the line that sells.

Forced air and gravity, Gas Circulators — Unit Heaters — Panel Heaters — Wall Heaters — Radiant Heaters.



PEERLESS MANUFACTURING CORP., LOUISVILLE 10, KY.

Butane & Propane

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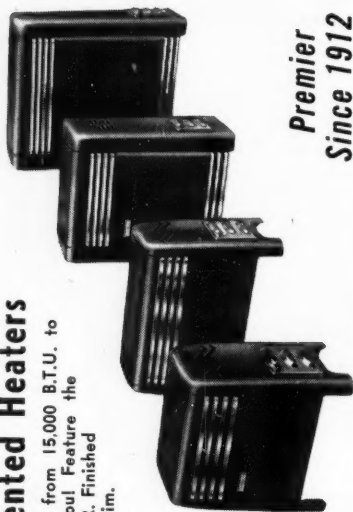
Producers of high quality
Liquefied Petroleum Gases Since 1931
Wholesale Only

THE CARTER OIL COMPANY
T U L S A , O K L A H O M A

A Complete Line of Vented Heaters

Four beautiful, new PREMIER Gas Heaters from 15,000 B.T.U. to 40,000 B.T.U. ready to make sales for you! Feature the complete line and you'll profit with PREMIER. Finished in brown porcelain enamel with chrome trim. Standard equipment includes constant burning manual pilot. A. G. A. approved.

Sell two PREMIER heaters for each installation. Provides better heat control . . . better heat distribution!



Premier
Since 1912

STOVE COMPANY
100 SOUTH SIXTEENTH STREET
BELLEVILLE, ILLINOIS

Premier

and Phillips B. Hoyt, former director of purchases, who became vice president in charge of purchases.

At the same time announcement of a new manager of ACF's valve division was made by Charles J. Hardy, chairman of the board. He is John C. Coonley, who joined ACF this year after a long association with the Walworth Co.

Thomas V. McCauley has been appointed by Surface Combustion Corp., Toledo, Ohio, as a "Janitrol" sales engineer in the Kansas City territory. He will specialize in the sales and servicing of home and commercial heating equipment, according to a recent announcement by H. C. Gurney, sales manger Janitrol domestic-commercial division.

Location of the Kansas City office with which Mr. McCauley will be associated is 1438-42 Dierks Bldg.

Surface Combustion has also appointed Wilson W. Morrow Janitrol sales representative in the Albany, N. Y. and Fairfield County, Conn., territory of the company. Mr. Morrow will work with the company's dealer organization for the sale of home and commercial heating equipment.

Mr. Morrow is located at 225 Broadway, New York City.

Another new Janitrol sales representative in the Kansas City district is Earl E. Barr, a 14-year employee of the Ohio Fuel Gas Co. In his new sales capacity for Surface Combustion, he will work closely with Wallace A. Adams, manager for the district.

In line with General Electric's increased activities in the gas heating field, A. E. Higgins has been appointed to the newly created post of manager, gas utility relations, air

To all wholesalers!!!

NOTE THIS CAREFULLY

Panoma L-P gases stand out because they are uniform in quality and free of sulfur, moisture and residue. Our butane and propane come from OUR wells . . . processed in OUR two automatically controlled plants. Since '38 wholesalers have satisfied themselves and their customers with Panoma products. For pure butane and propane, contact us!



Process pumps and automatic control equipment at the modern Panoma plant, Hooker, Oklahoma

PURE BUTANE AND PROPANE!

For information write or telephone TODAY!

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AMARILLO,
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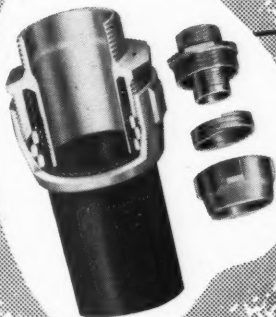
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**WHEREVER RUBBER HOSE IS USED
TO TRANSFER LP GAS!**

INTERNATIONAL SUPER-GRIP REATTACHABLE COUPLINGS

● Safety is assured by the leakproof performance of Super-Grip couplings. Gripping the hose over a wide area, a positive seal between hose and coupling is achieved. Pinching or bruising the hose at coupling is eliminated. Hose life is lengthened. Easy to install, no special tools are needed. Tightening the coupling contracts the special flat grip. This seal is so effective that on no high-pressure test yet has it been possible to determine signs of leakage.

The extra assurance given by Super-Grip against fire and hazards of leakage makes them a valuable investment to you. Write for catalog and prices.



**The INTERNATIONAL
METAL HOSE CO.**

A Division of The Gabriel Co.
CLEVELAND 3, OHIO

Liquefied Petroleum Gas

Cities Service Oil Co.

•

A DEPENDABLE SOURCE
UNIFORM PRODUCTS
A CAPABLE SUPPLIER
TWENTY YEARS' EXPERIENCE

•

IN LP GAS ALSO

CITIES SERVICE
MEANS
GOOD SERVICE

•

CITIES SERVICE OIL CO. (Del.)

•

BARTLESVILLE, OKLA.
CHICAGO, ILL.

Other Sales Offices

Cleveland
St. Paul

Kansas City
Toronto

conditioning department, according to H. M. Brundage, manager of the sales division.

Prior to the appointment, Mr. Higgins was vice president of the Rockwell Manufacturing Co., international division, New York. He has been associated with the gas industry since 1927.

The 80th birthday and the 50th anniversary of the company he founded were celebrated in Wichita, Kan., in May by W. C. Coleman, president and chairman of the board of the Coleman Co., Inc.

At a meeting of the stockholders during the week of celebration, the board of directors of the company was reelected and special tribute was paid to Mr. Coleman and the company he originally founded to popularize the light of the gasoline mantle lamp and which he built into one of the world's largest manufacturers of home heating appliances.

Officers also re-elected include Clarence Coleman, vice president in charge of manufacturing, and Sheldon Coleman, executive vice president and general manager, sons of the founder.

C. M. Scheer, formerly of North Texas Tank Co. and the Weatherhead Co., has joined the sales force of the LP-Gas division of Dallas Tank Co., it has been announced by J. W. Banks, division manager. Mr. Scheer will travel Texas, Oklahoma, Louisiana, New Mexico, Kansas, and Missouri.

Kelley Manufacturing Co., Houston, recently added G. V. Bain, longtime Southwest production engineer, to its industrial sales staff. General Manager W. M. Eliot announced the appointment.



The BEAUTY of THIS Range is The WAY it SELLS!

Of course it's beautiful — and it cooks as good as it looks! And that gives you a bonus in sales, for every housewife wants it in her kitchen. See for yourself: write for catalog and price information on the profit-making ENTERPRISE LP Line — the **complete** line with a model for every kitchen and a price for every purse.

Enterprise
—the Profit Line!

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MANUFACTURING COMPANY
NASHVILLE, TENN. • ESTABLISHED 1858



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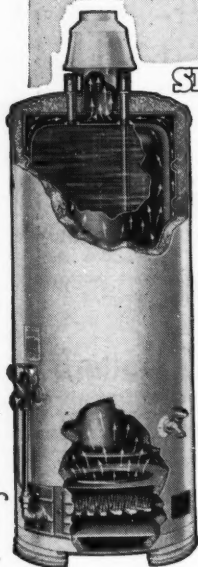
STREET _____

CITY _____

ZONE _____

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New...
INSIDE and OUT



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**COMPLETELY
AUTOMATIC**
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UNDERFIRED
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**FIBERGLAS
INSULATED**
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**ECONOMICAL
OPERATION**
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LONG LIFE

Yes . . . and it's that Security Quality that has made so many water heater prospects SECURITY owners! Finest materials and skilled workmanship mean dependable performance. These big HEAVY DUTY heaters are smartly styled. And thousands of owners are amazed at their efficiency, economy and long life.

Built to burn ALL GASES. Now is the time to assure yourself a steady . . . and satisfied . . . flow of customers. Build your sales on SECURITY . . . and profit!

SECURITY MFG. CO.
1630-48 Oakland Ave., Kansas City 3, Mo.

SECURITY

**HEAVY-DUTY
WATER
HEATERS**



Ray Cooper, of Dallas, Texas, has been promoted to district sales manager for the state of Oklahoma by Servel, Inc., manufacturers of Servel gas refrigerators, gas water heaters and "All-Year" air conditioners.

Mr. Cooper's appointment is announced by John K. Knighton, Servel's general sales manager.

Mr. Cooper has been with Servel since his separation from the Army Air Force in 1946. During that time he has been a water heater sales specialist and an appliance sales specialist, working out of the Servel regional sales office at Dallas, Texas.

Two new positions have been created in Servel's organization, and two new men have been appointed to head them, it is announced by W. Paul Jones, president. Robert J. Canniff, a 10-yearman with Servel and a gas industry veteran, moves up from advertising and promotion manager to the directorship of advertising and public relations; Charles F. Pearson, until recently assistant sales promotion manager for Hotpoint, Inc., becomes Servel sales promotion manager.

A. W. Ambrose, president of Cities Service Oil Co. (Del.), announces that Lee N. Haugen succeeded H. W. Camp as manager of the refining division on Sept. 1, at which time Mr. Camp retired.

Mr. Haugen, who has been general superintendent since 1947, has been employed by Cities Service 27 years. During this period his work has been devoted entirely to refinery operations.

Other Cities Service (Del.) appointments announced were: W. T. Cravens, assistant general superintendent of the refinery division, to superintendent; James W. McColl, of the Cities Service legal department, to

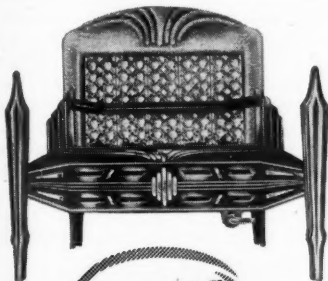
First See
GRIFFITHS
for
Conversion Parts

We can supply a wide assortment of spuds, orifices and other parts for converting domestic and commercial equipment to any type gas. Also, a complete line of repair parts for all types of gas meters.

Write for catalog.

**E. F. GRIFFITHS
 COMPANY**

350 E. Walnut Lane, Philadelphia 44, Pa.
*Serving the Gas Industries
 For Over 40 Years*
 Visit Us at Booths 720-721 — Gas Exposition —
 Atlantic City



ADAMS

RADIANT HEATERS

Looks good in the fireplace, ADAMS Radiants are styled for the home. This is the line for you to sell and make money on. Quality and top performance in our products since 1898.

Write today for full information.

ADAMS BROS. MFG. CO., INC.

1500 NORTH AVE., W. PITTSBURGH 33, PA.

**BE SAFE!
 BE SURE...**

Enjoy
 Insurance Protection
 to Fit Your Needs ...
COMPREHENSIVE GENERAL LIABILITY

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Get insurance coverage tailor-made to protect against loss due to all hazards for which you as operator, distributor or dealer may be liable or assume under contract. For free application blank covering all questions about the coverage you want, write TODAY. No obligation, of course.

LOUIS H. COLLAR, Manager

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The No. 5 cCc Gas Burner
 Will Win You Friends and
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This fine 20,000 B.t.u. Burner offers:

- Uniform east jets
- Efficient gas consumption
- Easy installation
- Easy servicing
- Fast heating for large hot water urns, and
- "Side-arm" water heaters

Also manufactured in smaller sizes for coffee urns and steam tables.

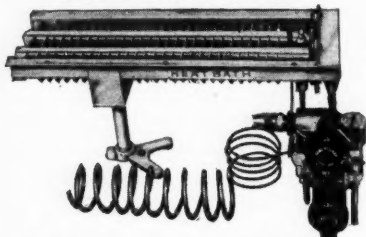
Produced by the manufacturer of the famous ARGIL Infra-Red Ray Burner.

Write for salesman's catalog sheets

Chicago Combustion Co., Inc.

457 WEST 45TH STREET, NEW YORK 19, N. Y.

THE 1950 LINE Heatbath CONVERSION BURNERS



LPD-30 for Propane Gas • 30,000 B.T.U.'s
A burner for straight Butane or Propane gases for kitchen heating. Capacity up to 36,000 B.T.U.'s per hour.
Designed for coal, combination and bungalow ranges. Quickly installed and guaranteed fool-proof.

Few territories open. Write for descriptive literature and prices.

HEATBATH APPLIANCES, INC.

P. O. Box 78

Springfield 1, Mass.

Notice To Dealers

BUTANE-PROPANE *News*

Filling Station Directory is now being compiled. If free listing is desired, information should be sent to

BUTANE-PROPANE *News*

198 S. Alvarado St., Los Angeles 4, Calif.

List company name. Owner's name.

Location. Services offered.

(See Page 110 of this issue for details.)

assistant superintendent of the company's land department; L. E. Taylor, superintendent of the Cit-Con Oil Corp. (Lake Charles, La.), to plant manager of the East Chicago, Ind., refinery. He replaced John D. Snakenberg, who was transferred to the manufacturing department in New York City.

Cities Service announced that a two-year expansion and modernization program is underway at its Ponca City (Okla.) refinery. A new catalytic cracking unit, new catalytic polymerization unit, and new gas plant are included in plans, as are revision of the vacuum flashing unit, treating processes, and steam and water systems.

Southern Coal Co., Inc., distributor of "Warm Morning" heaters, has organized a wholly owned subsidiary to handle the distribution of Warm Morning heating products and other equipment, according to an announcement by C. C. Davis, sales manager.

The new company is to be known as the Sinclair-Southern Co., Inc., and began active operation on July 1. General sales offices will remain at 333 North Michigan Ave., Chicago.

Officers of the Sinclair-Southern Co. are L. Russell Kelce, president; R. J. Billings, vice president; C. C. Davis, sales manager; and David S. Ogle, advertising manager.

A new 8-page, 5-color, sales catalog featuring the new Warm Morning line of gas heaters is now available to the retail trade, according to an announcement by the manufacturer, Locke Stove Co., Kansas City, Mo.

A warehouse designed to give West Coast distributors rapid delivery on Imperial products has been opened at 1341 S. Hope St., Los Angeles, by



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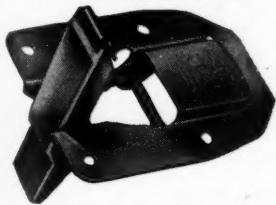
Listed By Underwriters' Laboratories

Unconditionally Guaranteed when installed according to manufacturer's instructions!

For complete information, contact your distributor; or send a postcard today to

D. H. KRUG COMPANY
Madison, South Dakota

HARTWELL The Latest Word In LATCHES



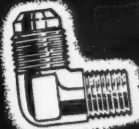
Completely flush installation,
Positive trouble-free action.
Modern in appearance. Push
button style also available.

Write for Catalog

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All types Brass Fittings, Connectors, Valves,
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Appliances of All Types and Makes.

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Supply Company warehouses the best
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801 Allen Avenue, Glendale 1, California
*Manufacturers of Automatic Pressure, Temperature,
Level and Flow Controls*

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DISTRIBUTORS IN PRINCIPAL CITIES.

Mallinckrodt
**ETHYL
MERCAPTAN**
purified

it says **LOOK OUT**

- The accepted standard odorant for natural or liquefied petroleum gas — gives sure but harmless warning.
- Purified — Moisture-free — **PROTECTS FIXTURES.** Meets all 15 qualifications of National Bureau of Standards.

**MALLINCKRODT
CHEMICAL WORKS**

Mallinckrodt St., St. Louis 7, Mo.
72 Gold St., New York 8, New York

The Imperial Brass Manufacturing Co., Chicago.

The warehouse carries stocks of Imperial tube fittings, tube working tools, shutoff valves, and a complete line of Imperial refrigeration valves, fittings, driers and tools.

Gordon Duerr, West Coast sales manager, is in charge of the warehouse.

Completion of the new plant of the Vicksburg Tank Co., Inc., at Vicksburg, Miss., was celebrated at a barbecue given at the plant site by the Chamber of Commerce of that city and attended by approximately 200 members, wives and company officials.

Formerly the Pyramid Manufacturing Co., of Alexandria, La., the new plant is already in operation manufacturing the Pyramid line of LP-Gas systems. W. L. McDowell is president and general manager.

Thirty Rapid Thermogas representatives from three states—including president Charles O. Russell, Des Moines—took a two-day trip recently to the Two Rivers, Wis., plant of Hamilton Manufacturing Co. as the guests of Hamilton headman Edward P. Hamilton. A plant tour, discussion sessions on Hamilton gas-fired automatic clothes dryers, and general orientation of the dealers with regard to Hamilton products were feature activities.

Mark W. Battersby has been appointed district sales manager for the Pacific Northwest by the home appliance division of Murray Corp. of America. He will sell Murray ranges, steel kitchens, and bathroom fixtures in Washington, Oregon, Idaho, and Utah. His headquarters will be in Seattle.